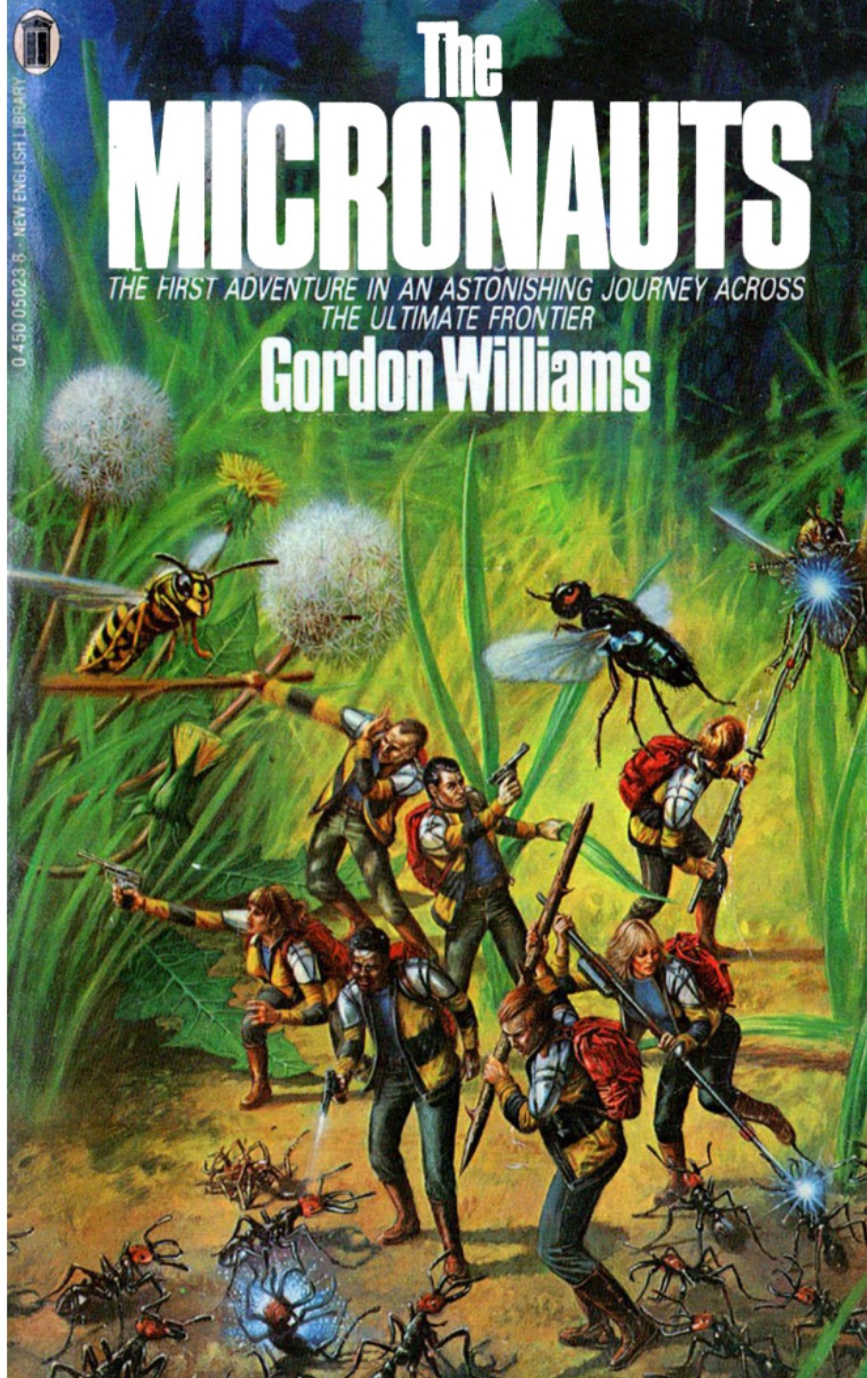




The MICRONAUTS

THE FIRST ADVENTURE IN AN ASTONISHING JOURNEY ACROSS
THE ULTIMATE FRONTIER

Gordon Williams



About This Book

The world might have been coming to-an end, so violent was the rushing storm of noise and commotion, the shaking of grass saplings with earthquake ferocity, the pelting down of seeds through a snowstream of white dust. They cringed in fear, not knowing which way to run from the monstrous creatures screaming and squabbling above their heads.

Corporal Carr fired one shot before Magruder and the American grabbed his arm. Robinson had a glimpse of great claws and scaly legs and an expanse of creamy feathers. Carr pushed Magruder away, raising his pistol for another shot...

THE MICRONAUTS
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Illustrated by Boris Vallejo



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Arcadia

Darkness fell quickly, catching them out in the open. They were inflating the tent when they heard it.

“That’s an owl!”

“Don’t move—they can see better at night than we can in sunshine.”

“Shut up! Everybody freeze!”

*From the blackness of the huge night it came again, a throaty hooting and then the shrill **kuvvit**, **kuvvit** of a tawny owl.*

“It’s right overhead, for Christ’s sake!”

“Keep quiet, man, their hearing is incredible.”

“Miloblenska?”

“Where’s that fool gone?”

“Miloblenska? What the hell—”

There was a massive swoosh of heavily-feathered wings—and then the tiny, distant screams of a man...

Chapter 1

Hunger.

The whole world was hungry...

The young driver who did an unscheduled run from WFC's New York HQ (the old PanAm Building) to Kennedy Airport on the night of Friday, September 5, had lost two days' food coupons betting on the number of death sentences in the Westchester baby-buying trial. His next legal food would be Meal Two on Sunday. He knew his passenger must be carrying an official travel-pack ration.

Holding the door of the old Lincoln, he said, jokingly, "Us staff drivers don't get tipped, they're very strict about that. But with edible tips—where's the evidence?"

His passenger, a gaunt, bearded man wearing an old combat jacket, olive trousers, and bare feet in thong sandals, shook his head. The driver looked nervously round the floodlit approachway. It was deserted. "I was joking, is all," he said ingratiatingly. The gaunt man signed the warrant and picked up his old leather bag.

"Your sense of humor could easily earn you three years in a permafrost camp, son."

"I got three dependents—you won't report me, willya?" the driver said pleadingly but the tall man was already showing his white ID card—WORLD FOOD CONTROL, DEP'T. OF SCIENCE, STATUS-TEMPORARY—to the armed security guards.

There were only three people ahead of him at the desk marked EUROPE-ALL ZONES, a shabbily-dressed young woman with a toddler in walking-harness, and a young-looking man wearing the severe black raincoat favored by WFC administrators. The child was crying.

He ignored it. For a moment, his eye rested on the inevitable WFC poster, the fatherly face of Commissioner Towne and a single wheatsheaf. A faint sneer passed across his gaunt features.

"Your travel authorization is not effective before September twentieth," a uniformed desk clerk was saying to the young mother.

"I told you—my husband is a sea-bed driller, he's being assigned to Sakhalin Island on Monday—if I don't reach Moscow by Sunday night, I won't see him for another six months. Please let me catch this flight."

“That’s impossible. Step aside, please. Your papers, sir?”

The young executive in the black raincoat produced a plastic wallet from his aluminum attaché case. The child dropped to the litter-strewn floor in a tantrum.

“What’s wrong with your little girl?” the tall man asked the young mother.

“He’s not a girl! He’s hungry and tired—we hitched here from Chicago by road.” She tried to drag the child off the unswept floor. “I had to give most of our coupons to a convoy driver.”

The desk clerk handed his papers back to the young executive. “Go through to the departure lounge, Mr. Larson. Flight time is about ten or fifteen minutes.”

Seeing his red ID card, the young mother grabbed at his arm. “You’re top brass from Geneva. You could authorize my flight, if I don’t—”

Seemingly terrified by her touch, he slapped at her hands. The desk clerk pressed a button. “Your papers?” the other clerk said curtly to the tall man, obviously suspicious of his long, gray hair and eccentric clothing. The tall man handed over his white card and warrant sheet. The young executive pulled himself away from the mother.

“Purpose of your flight, Mr. Bruce?” the desk clerk demanded. “Professor Bruce. I’m going home. Can’t you help that woman?”

“She should not have been allowed into the building. You’re a registered Outlander, Professor?”

“That’s right.”

The two desk clerks conferred, murmuring secretively and giving him hostile glances.

“We have to know the specific circumstances of your journey, one of them said snappily.

“Can’t you read the warrant?”

The desk clerk folded his arms. “Warrants can be forged.” He looked at the other clerk. “George—test his ID card under the fluoroscope.” He looked back at Bruce. “Well?”

Controlling his temper, Bruce indicated the warrant. His tone was icy. “Those black marks are words. It’s called reading.”

The clerk’s face tightened. “If you want to be obstructive, you can stay here all night.”

Bruce slapped both hands down on the counter. “You said the *specific* circumstances?” he said, with icy quietness. “All right. There’s a symbiont bacteria in the gut of termites which breaks down cellulose. Cellulose is a sugar the human body cannot absorb. I’m consultant to a

program at NRS Six, Georgia, to culture that symbiont bacteria artificially so that we can turn plant cellulose into a carbohydrate for human consumption. You with me so far, son?" His voice began to rise. A uniformed guard came hurrying across the concourse. "I'm now flying London-Helsinki. From there, I get a Department of Mines flight to Vaasa on the Gulf of Bothnia. After that, Frontier Security gives me a ride up to Lake Plateau where I live—far from creeps like you. I do this trip every four or five months, as you goddamn well know. Now, are you going to give me any more of this crap or—"

"Let go of my baby!"

The guard was twisting the young mother's arm, trying to separate her and the child. The young executive, Larson, had just reached the narrow gateway which housed the ultrasonic decontamination beams. His eyes widened incredulously as he heard the tall, gaunt man's voice. "Take your hands off her, you ape!"

Larson hurried into the narrow tunnel, following the signposted procedures meticulously, praying that the incident would not delay the flight. He was an assistant comptroller in the Department of Finance, WFC HQ, Geneva; his hunger was of a different kind...

To his amazement, the woman and child came into the lounge a few minutes later, followed by the gaunt man in the army jacket. They sat at the other end of the big, bare room.

From his old leather bag Bruce produced two small packages. "This one's dried hare," he said to the mother, "needs a lot of chewing. This one's what we call a protenoid, its made from a mixture of dry amino acids—he probably won't care for the taste. Sorry, it's all I have."

For all the urgency of his return to Geneva, Larson was compelled to intervene. "Don't you know it's a serious offense to bring animal flesh into a Scheduled Zone?"

Bruce turned slowly, piercing eyes resting on Larson's twitching cheek, a nervous tic which the ambitious young finance officer could never control in stress situations.

"Another member of the new dominant species, Homo bureaucratis," Bruce's deep voice said across the empty lounge. "Don't you remember being hungry as a child—or does your evolutionary stage bypass childhood?"

"I should report you for making an unofficial transfer of food allotments—"

"Listen, sonny, it was the unofficial transfer of food that got this lady on the flight."

Larson was shocked. “You bribed the desk clerk?”

“I gave him something real to chew, it seemed to rekindle his sense of brotherly love. The guard got some as well. You going to report us all?”

Larson sat down, his twitching face a brilliant red. “I cannot afford to delay the flight,” he said weakly. “I shall make a report back in Geneva.”

“You do that, son, your type won’t be happy until that blissful Arcadia where you have the whole world population caged and numbered. My section is Special Research Projects—you should get a fair hearing from Chief-Coordinator Richards, he *loves* bureaucrats.”

The solitary stewardess came down the gangway with the usual selection of sleeping pills, mild hallucinogens and ganja cigarettes. Bruce waved them away. “You’ll enjoy our in-flight movie, sir, it’s a new one from Brazil about a breakthrough in phytoplankton harvesting techniques—”

“I couldn’t stand the excitement. Pull my curtain, that’s a good girl. And make sure that infant gets something to eat.”

Alone in the rear cabin for red card passengers, Larson spent the flight outlining the report he would be making personally to the Commissioner in the morning. Having a dread of high altitudes, he did not look down at the deserted spaces of Picardy when the captain of the old 747 shuttle announced their descent to Geneva, but munched hurriedly on his VIP travel-pack ration of expanded chicken-substitute on fish-flour bread. It was the career break he had always prayed for, not just a crime but a major conspiracy!

Chapter 2

Dawn brought the food rioters back to the open space of rough ground in front of the dock warehouse complex. A truck, cocooned in an improvised shield of vulcanized rubber, nosed out from the old tenement buildings.

“Aim low for the wheels,” Captain Robinson said into his helmet transmitter. The black-uniformed SD squad started firing, but the truck picked up speed across the brick-strewn ground. Behind it came the yelling rioters.

The truck smashed into the electrified fence. A concrete post was jerked out of the ground. “For Christ’s sake, turn off the water-cannons—there’s five thousand volts going through that wire. Aim above their heads, Bravo Company.”

A hundred or so rioters ran for shelter among the old buildings as the troops fired their automatic rifles. The truck reversed, dragging the entangled heavy-mesh for a few yards, then freeing itself and lurching away.

They crouched behind the armored car, taking off their vizored helmets and massaging their necks.

“How did they know about the shipment?” asked Sergeant Smith. “Those containers were sealed in the north of Scotland.”

“Dockworkers can smell what’s inside a refrigerated container.”

“Listen—it’s coming again.”

Robinson wearily put on his black helmet. “Let’s hope we don’t give them a martyr.” But it was not the rioters’ truck. Across the open ground came a big black troop carrier, with only the extra antennae and scanners on the roof to denote its conversion to a Mobile Command Vehicle. It pulled up beside the much smaller armored car. A door slid open. Out stepped a powerfully-built man wearing the green uniform of WFC Security. On his helmet were four white stars.

They saluted.

“I am Staff-Commander Khomich,” said the man in the green uniform, raising his visor. “Your brigade commander has waived to me on this Event. Give me your appraisal, Captain.”

The voice was not exactly harsh, but completely toneless, English with

a faintly Slavic inflexion. The blue eyes were small, but intensely alert. Robinson swallowed. "Butcher" Khomich!

"We estimate about five hundred of them, sir. They've just tried to ram the fence with an insulated truck. Yesterday we thought it was spontaneous, but this morning they've been carrying a Union Jack."

"The emblem of the Free England group?"

"I think we can hold them off, sir."

"Come into the MCV, Captain."

Inside the MCV, Khomich took off his helmet. Robinson was surprised at how young he appeared, not much older than himself, his face just as hard and expressionless as it looked on television, but his skin pink and smooth. His fair hair was closely cropped.

"Holding them off is no longer satisfactory," Khomich said. He looked into the darkened gangway at the rear, where the blue glow from video-monitors outlined the profiles of operators hunched at the console bank.

"Are the helicopters here yet?"

"Approaching from the southwest, sir."

He turned to the young SD captain. "Stand down your water-cannons. Have all your men fall back to this position."

"But that will only encourage them, sir!"

"We might as well get it over with, Captain."

"They'll get tired and go away, sir. These Local Events never amount to much."

"This has been reclassified as a Major Event—it requires a Maximum Impact response."

"These people are simply hungry!"

"Most people are hungry, but they are not rioting."

"Look, sir, they've heard that four thousand frozen reindeer carcasses are being shipped to Hamburg. How would you react if you heard that some bloody penpusher in Geneva had decided—"

"I react only to orders, Captain."

"Getting video now, sir, said an operator, "the crowds reassembling."

On one monitor, they saw an aerial view of the rioters in a side street.

"Gas-wagons standing by, sir."

"Tell the snatch-group lieutenant I want that flag taken out. Captain, have your squad fall back."

Robinson stared defiantly at Khomich.

"Do you want your men gassed?"

Robinson hesitated, then pressed his transmission switch. "Black leader to Bravo Company—fall back to the MCV. Prepare for gas."

The rioters' truck came into vision. Seeing the black-uniformed Special Duty squad falling back, the rioters spread out. Suddenly, a group of commandos in protective padding darted out from behind an adjoining building. Before the rioters could defend their flank, the bulky commandos battered into the crowd, seized the illegal Union Jack, and retreated without a loss.

"It's not policy to admit the existence of specific terrorist groups, Khomich explained. A helicopter appeared on the ground-level monitor. Khomich picked up a hand-mike.

"This is Zone Security Command. Lay down your weapons and remain exactly where you are. There will be no more warnings.

Some of the rioters pointed, then veered toward the MCV, throwing stones. The insulated truck headed for the fence. Over the video sound-channel came the voice of a helicopter pilot.

"There's a sniper on a roof down there."

"Scorch him out."

The truck hit the fence. Another concrete post was dragged out of the ground. The crowd ran for the gap.

"Gas now."

On the ground-level monitor Robinson saw a gastender appear at the other side of the open ground. Out of what looked like a gun barrel spumed a jet of white vapor.

The MCV's camera panned up to roof-level. From the nose of a black and yellow helicopter came a spurt of white flame.

"Got him."

A burning man appeared from behind a brick chimney column. He made jerky attempts to beat out flames on his shoulders, then lost his footing on the black tiles. The flames flared as he soared down six stories to the ground. Both monitors now carried misty pictures with only a few dark silhouettes visible.





From the nose of a black and yellow helicopter came a spurt of white flame.

“Bring up the cages.”

Khomich turned to Robinson. “We wait for ten minutes to allow the stun-gas to liquefy, then your men will identify the terrorist leaders. Your men will not be required to eliminate their own nationals. The

snatchgroup will provide the execution squad.”

“You’re just going to mow them down?”

“Summary punishment is the more usual expression.”

“All for a television show? No wonder they call you the bloody butcher!”

Khomich’s face was expressionless. “All right, Captain, today you can make the decisions. Call it part of your education.”

Putting on their helmets, they went outside. Misty traces of greasy vapor lay in puddles on the broken ground. The big mobile cage vehicles were brought into line. Black-uniformed SD men and padded snatch commandos moved among the crowd. People docilely allowed themselves to be searched and then steered up the steps into the cages. Among them were women and teenagers. Occasionally, a man would be led to a group being guarded by commandos. One helicopter was still filming overhead. Khomich watched impassively, his back as straight as a concrete post.

Somebody screamed. Clutching fingers rattled the mesh cages. From the group of men ringed by the snatch-commandos came a shout.

“England Alone! Down with the Treaty! Long live Free England!”

The rest of the slogans were drowned in wails and screams from the people in the cages. A snatch-group sergeant approached Khomich.

“Twenty-three ringleaders, Sir—one is a female, sir.”

“You are not going to shoot a woman, are you?” Robinson demanded.

“It was *women* who insisted on abolishing gallantry. You would *like* these gangsters to be reprieved, Captain?”

“Of course I would!”

“One minute. Decisions must take into account all known facts. There are similar riots taking place at this moment in Charleroi and Milan. It is expected that Monday’s proclamation of ration reduction will cause even greater unrest. The film of this Event will be shown on all networks as a salutary reminder that neither WFC nor the Zonal Councils will tolerate civil disobedience. It is within my authority to reprieve these gangsters, but I do not have total discretion. The mandatory alternative—I repeat, mandatory—in this case would be the complete cessation of all external food supplies to the Inner London district for a period of ten days.”

“But that would mean hundreds of people starving!”

“They are your people, Captain. You decide.”

Robinson looked at the faces pathetically crushed against the mesh cages and then at the shabby group beside the wire. In the end, there

was no choice.

“Do the others have to watch?”

“The lesson must be learned by everybody.”

Robinson covered his eyes for a moment. “Shoot them then.”

He stared at a point on the warehouse roof. Rifles chattered. For a few long seconds, there was total silence

The wailing and screaming started in earnest as the big mobile cages began to pull out. The bodies lay in an untidy row on the rough ground.

“All you have to remember is that it was necessary to save a far greater number of lives, Captain,” Khomich said quietly. “I take my orders from the Commissioner—he is our best hope, believe me.”

They saluted. Khomich hesitated. “You made the correct decision, Captain. Punitive action should never be delayed. He stared at the ground, dragging a little furrow with his black army boot. Robinson could not understand what was making him uneasy. Then he looked up. “Would you like to re-muster to the Department of Security, Captain?” he said quickly.

“I hadn’t ever considered it, sir.”

“I will speak to your Area OC.” Then, to Robinson’s Surprise, Khomich’s square, white hand gripped his arm. “You think I enjoy being known as ‘The Butcher’?” He turned quickly and climbed into the big black MCV. As it pulled away Sergeant Smith took off his helmet.

“Gave me the shudders just looking at that bastard.”

“Shut up, Smith,” Robinson said angrily. “Get those bodies piled up for burning.”

Chapter 3

With only thirteen days before the most crucial Supreme Council of his career, the Commissioner rose at 0500 hours on Saturday morning. He then read reports in his bath, using no soap although as chief executive he was exempt from water-cycling regulations.

There was something inhuman, almost ominous, about the shiny black walls of the steamy bathroom, the stainless steel of its fittings. Yet, even naked, Towne held on to his aura of power, his shoulders and arms as powerful as a longshoreman's, only his silver hair indicating the imminence of old age.

While his hands were still dry, he looked at a leather-bound book with a gold-embossed title—*The Blind Years*, a pictorial album of the pre-famine decades. PropEd had produced it for official libraries to show in human terms the mistakes which had produced global starvation and the deaths of two billion people. Archive photographs showed dirty, overcrowded streets in the human anthills of the pre-famine cities, smoke-belching industrial complexes, sulphuric rivers, sterile lakes, oil-clogged beaches.

“Commissioner to PropEd,” he said into his minirecorder, “your new book is excellently produced, but do you remember pornography? These street scenes, for instance—why do I *enjoy* looking at them? The faces heading for doom are too damned *fat*. Read this on Grade Two rations and you wouldn't care about pollution, you'd only go mad with jealousy.”

Next, he read a much-amended proof of the text for the entry under *Pollution—Specific Factors* in a schools audio-visual encyclopedia, rewritten many times by various committees to meet all policy objections. Scientific experimentation must not be shown as bad in itself, although the recklessness of past scientists was blamed by many for the famine cycle—the theory that germ warfare trials in the middle of the century had unleashed the mutant blight bacteria.

Another theory was that shrinkage of the upper-atmosphere ozone layer, through the wholesale release of industrial and commercial gases, had allowed an increase of radiation to produce the virus mutants. And a third theory was that an infinitesimal shift in the Earth's tilt had

produced the erratic weather patterns which turned arable lands into deserts—and that the mutant viruses had merely flourished because of their new environment. It all boiled down to whether you believed that men had brought disaster on themselves by meddling with chemical-bacteriological forces they did not understand and to whose repercussions they had a childish indifference—or whether the famines would have come anyway, through the forces of nature itself.

The problem was that each theory had more than purely philosophical ramifications; if nature—the universe—was to blame then people might ignore the lessons of the past. But if all responsibility was put on the scientists of previous generations, then modern science—and modern government—might easily come under public suspicion.

Loss of WFC's governmental authority was what he feared most. He held the recorder well above the warm water. "Commissioner to History Department. Old wars and old defoliants belong to history and, in any case, why pick on the U.S.A.? Didn't the United Kingdom hold germ warfare trials off the coast of Scotland, making one island too dangerous to walk on for a hundred years? Did the Soviets have no military bacteriological establishment? Didn't the Chinese and the French go on testing nuclear devices long after everybody knew of the dangers? Didn't India insist on a nuclear program although millions of her people were starving? Let's write this again and be less emotive—history can hand out the verdict."

The next report in his wire basket was marked MOST SECRET. It came from the Department of Population, a Statistical analysis of sample censuses. After reading a few pages, he hissed sharply.

"Commissioner to Secretary for Population. I refer to Memorandum Delta Two attached to your report dated September second. To say that a drop of nought-point-seven-percent in the registered populations of six small subdistricts in Sao Paulo and Kobe indicates the possibility of a geometrical collapse in the world population is wildly alarmist. All copies must be withdrawn immediately. See me today."

As he shaved with his grandfather's cut-throat razor, the commissioner, a stocky man with stiff white hair and the hard belly of a fitness fetishist, frowned at himself in the mirror. Had Eisentrager gone against him as well?

By 0540 he was having breakfast in the kitchen of his private apartment on the top floor of the WFC Building; that morning he had one slice of a new simulated bacon, one ounce of cassava-based steak, two slices of bread-style cellulose for roughage, and half a liter of direct-

grass milk. At the end of this meal, his elderly servant Josef, a Berliner who had been with him since his days as Canadian delegate to the old EEC crisis conferences, said, "You should have real food from our research farms, Herr Commissioner, that ersatz rubbish is no good for you."

"Millions exist on worse." He drank the rest of his gray milk. "Josef—sit down for a moment. Have we any tobacco cigarettes left?"

"There are still four in the box from the East African delegation."

"Have one—I'll sniff and pretend it's thirty years ago. The old man's rheumatic hands shook as he lit up.

The commissioner watched approvingly, feeling almost paternal although Josef was fifteen years older than himself and would have been downgraded to Grade Three rations but for his protection. "Josef—isn't it a fact that all the great rulers of the past inevitably suffered from paranoia?"

The old man blinked as unaccustomed smoke reached his eyes. "Stalin did, most of his life. Adolf Hitler tended more to schizophrenia. Generally, it was their subjects who did the suffering."

"Josef—apart from you, I feel pretty much alone, certainly since Beatrix died. I'm not sure but I might not be suffering from paranoia. How can you tell?"

"You have delusions that people are conspiring against you. Unfortunately, they usually are." Seeing that the Commissioner was in no mood for jokes, Josef added quickly, "A psychiatrist would know—if you believe in them."

"I can't even ask a psychiatrist. If it leaked that I was having treatment for paranoid delusions, I would be finished."

You are suffering from delusions?"

"Half the time I'm sure they're delusions—then, in the bath a few moments ago, for instance—there's a new Population survey, some small areas show reductions of less than one percent. But Eisentrager has allowed one of his statistical evaluators to attach an analysis which says we may be faced with a geometrical collapse, not simply a gradual decline in numbers over two or three generations, but an accelerating collapse—fewer workers producing less food, therefore more starvation, therefore fewer workers—and so on. If this projection became public knowledge—if WFC's zero population growth policy can be shown to be failing to keep even two billion alive then—I would be removed from office and I don't see the organization lasting long after me."

"All this from a few sample statistics?"

“We’re talking about the extinction of the human race, Josef—nobody will wait around for boring old *facts*, it’ll be panic stations, every man for himself. The rich U.S.A. Zones would grab the program for petroleum-based protein—half of their zones are self-sufficient as it is. The Soviets would take over the geothermic stations. They’re already well ahead with the barrage construction for diverting the Kuro Siwa current into the Tartar Strait; if they can turn the Sea of Okhotsk into a temperate zone, they’ll have extra food for millions of people—that frozen tundra of theirs is free from blight. Look at Brazil—they could support thirty million people without our programs. Even if the Councils wanted to stay in—would their populations allow them once they got the idea they were doomed? And what would happen to the nontechnological zones? Back to the Stone Age, a few nomads scratching around for roots and grubs? They’d go to war to prevent that. The same old story that cursed the human race for five thousand years: greed, jealousy, destruction—”

The old man scratched the bridge of his nose. “What are these so-called delusions of yours?”

“I’m beginning to think there are people in this building actively conspiring against me. Eisentrager must have known that the Memorandum could leak in a hundred different ways. In thirteen days, the heads of the zonal councils and their secretaries will be flooding into this building—half of them looking for excuses to cut their Budget contributions, the other half determined to get bigger allocations. That Memorandum could start a stampede.”

Reluctantly, Josef stubbed out the precious tobacco cigarette. “It’s not much to base fears of a conspiracy on, Herr Commissioner.”

“All right—why did I have to tell Security Secretary Khouri to assign Khomich to the London riots? He knew we’d want to deal with one of these outbreaks before Monday’s ration-cut proclamation. We think there are secret lines of communication between the subversive groups—why hasn’t Khouri produced any of these gangsters for a Network Trial? Is he trying to discredit me? Or is he in league with them?”

Josef scratched his ear. “The Supreme Council would never back a wolf like Khourt—”

“No, but they might back George Richards—the richer zones anyway. There is a lot of support for his philosophy—he and his kind see the human race as some kind of mystical entity. I always get the impression they think the deaths of a billion or so people would be a blessing in disguise—some way of producing a world of plenty for the chosen

survivors, the strongest and the cleverest. Meaning themselves, of course. I just happen to believe that every one of the two billion people out there has an equal right to live. Am I wrong?"

"I am only an old man with shaky hands, Josef said quietly. "I go nowhere and I have no friends, but every morning I am glad to find myself still alive. Herr Commissioner—I don't care how you do it, but just keep me alive."

Half an hour later, the Commissioner was in the Main Operation Room in the lower basement. He and the duty controller leaned forward into the brilliant light from the canopy over the vast contour map of the Western hemisphere. He saw the positions of supply convoys in the south Atlantic. He read the latest brigade reports from the European riot cities. He saw the latest telex from the East African campaign, where a combined force of Indian and Turkish troops under Supreme Council mandate was bringing the remainder of Kenya's agricultural land into Scheduled Zone control. Casualties among the resisting farmers were not as heavy as the chiefs of staff had projected.

"That will disappoint the public," said the young German controller, "fewer mouths to feed—that's what everybody thinks when they hear about deaths and disasters. They'd be dancing in the streets if the old bubonic plagues came back—somewhere else, of course."

"Fewer mouths means less manpower, the commissioner said firmly. "We are having to declassify another ten thousand kilometers of roads in southern Europe because we don't have the men to maintain them."

"But the air is cleaner, sir."

"You think starvation is a reasonable price to pay for clear blue skies?"

By 0730 hours he was at the marble-topped desk in his own office, a long, windowless room with a low ceiling and only one chair—his own. As he signed letters and directives typed the previous evening, he thought of old Josef's words—"*Keep me alive*"—one old man speaking for the millions. He was their protector; he needed no other justification.

At 0800 hours his personal secretary, Madelaine Schumann, a 50-year-old Viennese who had been with him for nine years, arrived. Many wondered why so important a man kept such a plain woman as his secretary, but, in his experience, beauty had no loyalty. At 0825 Mazzini, head of the WFC networks, came on the videoconsole of his desk console.

"Mazzini—I want an all-networks report on the London riots for Sunday—prime time in all zones. Better satellite it to the U.S. as well.

You think an hour would be too long? Khomich is handling it—Maximum Impact.”

“For me a minute of ‘The Butcher’ is too long, Commissioner, speaking as a human being—but, as network controller, I have to acknowledge his star rating—he deals in death and that is what viewers like—other people dying, of course.”

“I want it presented more in sorrow than anger—don’t let it *sound* like a grim warning.”

“Understood. You are coming to our preview this morning?”

“Yes.”

Mazzini’s smiling face went off vision. He was loyal—yet why did he make that remark about Khomich? Everybody knew that he had personally brought Khomich up from the ranks. Was it a criticism of himself?

Schumann showed in Secretary for Population Eisentrager, a man he had known and trusted for a quarter of a century, a bit of a pedant, but a dedicated servant to the ideals of WFC.

“I don’t understand why you want the reports withdrawn, Commissioner,” said the thin, doleful Bavarian.

“What the hell got into you, Kurt?”

“Facts must be faced, Commissioner. Those sample areas are our showpieces. They were among the first to come under full WFC control. No child is born but to parents who meet our highest medical and psychological criteria. There have been no epidemics and not even any temporary food shortages.”

“How could the population be dropping then?”

“Computer analysis revealed several factors. A slight increase in miscarriages, an increase in the suicide rate—”

“*Suicide?*”

“We live in a depressing world, Commissioner.”

“But those areas have had no food shortages.”

“Technically, no. According to our nutritionists the Grade One and the Grade Two rations contain all the proteins, carbohydrates, fats, salts, and vitamins necessary to sustain active life. But we are not battery hens, Commissioner. We left our ape cousins behind in the equatorial forests because *Homo sapiens* could eat anything, therefore he could live anywhere and adapt to all climatic conditions. Perhaps his varied diet was what opened up his brain and made him curious about the world and his place in it. The main factor in these population samples is a rising incidence of failure to conceive—among healthy, scientifically-

selected breeding couples. There seems to be no physiological reason. Is it simply boredom? Monotony? Perhaps men need the psychological release of intermittent gluttony, perhaps it was wars and violence that made us strong—”

“Nonsense. I will simply not tolerate this kind of hysterical conjecture —”

“Conjecture? Right then—will you authorize a Budget appropriation for a complete world census?”

“If you hold a census, people expect to know the result. What if this damned projection is correct?”

Eisenstrager blinked mournfully. “In that case, the ants and lizards will get their world back.”

“Kurt—if I ever hear you expressing those kind of negative thoughts again, you will be retired instantly!” The Commissioner stood up, his face flushed with anger. He then made a weary gesture and came around the marble desk. “I’m sorry, Kurt, I have a lot on my mind. I don’t like suppressing information, but that report would cause panic. As soon as the Supreme Council session is over, we’ll have an interdepartmental session on it. Agreed?”

“If you say so, Commissioner.”

When Eisenstrager had gone, he sat down, drumming his fingers on the cold marble. Some things Kurt had said sounded familiar—particularly about the ants getting their world back. George Richards was always using slick phrases of that sort. Were they in collusion?

His buzzer signaled.

“There’s an officer from the Department of Finance who insists on seeing you,” Schumann said. “His name is Larson; he says it is urgent and confidential. Shall I tell him to apply for an appointment?”

“Wait a moment.”

He switched into the internal spy circuit, pressing numbered buttons which gave him a view of the outer reception room. At the guard’s desk was a young executive he remembered seeing among Geetanji’s staff at a Budget meeting.

“I’ll see him—make sure he has been searched.”

He was standing when Larson entered the long, low room. He remembered the facial tic.

“You have two minutes, Larson. I hope it isn’t something you should have put through channels.”

Less sure now that he was doing the correct thing, Larson put his aluminum case on the desk, then decided it might scratch the

Commissioner's marble and put it on the floor. When he straightened up, his face was red. "I have just come back from New York, sir," he stammered. "I was over there doing one of our irregular audits in the Procurements Office. First off, I discovered a discrepancy in titanium deliveries—"

"A discrepancy? You're wasting my time with crap like that?"

"It's more than one discrepancy, sir. Somebody has been stealing WFC equipment and materials. I only went back fifteen months, but I found internal losses to the value of nine million marks."

The Commissioner walked around his desk and put his hand on Larson's shoulder. Stress was a major occupational hazard among the Geneva secretariat—the tic was a sure sign. "Walk with me to the cinema, Larson," he said sympathetically. He waited until they had gone through Schumann's office and then the guard's room, walking along the brilliantly-lit corridor. "Nine million marks? That's an awful lot of stealing, Larson. How sure are you?"

"I have all the documentation here, Commissioner." Larson held up the aluminum case. "There are procurement requisitions, stock release authorizations, cargo manifests, delivery signals—I couldn't show them to anyone else because it obviously involves people at a high level, sir."

The Commissioner stopped. "What do you mean—high level?"

"None of the missing stuff could have been taken without the knowledge of somebody pretty high up in SRP, sir."

The Commissioner looked up and down the long, empty corridor. "Are you seriously telling me that SRP executives have been conspiring to steal nine million marks' worth of WFC materials—not food?"

"Yes, sir. It has been very cleverly done—on a systematic basis."

"Any names?"

"Well, sir, I hesitate to—"

"You've gone too far to hesitate, Larson."

"Chief-Coordinator Richards either knows about it, or somebody has been forging his authorizations, sir."

The Commissioner drew his hand down his nose and over his mouth. For a moment, he looked old and indecisive. A flicker of doubt crossed Larson's face. Maybe he had made a mistake, maybe he should have gone to Richards—everybody knew he was the most ambitious man in the building.

Then the Commissioner took his arm.

"Come on, son, we're going to the movies. Stay close to me and don't let that case out of your hands!"

Chapter 4

The only sound was of an unseen baby, crying...

There were eight people in a large salon with a high, ornate ceiling, four men in dinner jackets, four young women in revealing gowns. The youngest man was obviously their guest. The facial gestures of the women were surprisingly lewd.

They sat at a glass table. Four naked girls served each guest, plates piled so heavily food spilled onto the glass.

The youngest man's face became puzzled and then horrified as they started to tear wings and legs off whole chickens, wolfing into white flesh, cramming their mouths, swilling down glasses of wine. Through the glass table, he saw entwined legs, groping hands...

Still the only sound was of a baby crying...

A farmer walked across a harvest field in blinding sunshine. His heavy boots sank into dry, baking soil between thin patches of wheat. He pulled off an ear and rubbed it between his palms. Blowing away the chaff, he was left with a few wizened grains. As he stared across the blighted field, tears formed in his eyes...

The child went on crying...

In the deserted suburban street, all seemed normal—neat villas, parked cars, trim gardens—but with uncut lawns. The door of one house lay ajar. Inside, it was a typical suburban home, mass-produced paintings of rural scenes on the walls, coats and hats on a coatrack.

In the lounge, three people were sitting on a sofa. On the TV screen flickered news pictures of fighting crowds. On top of the TV set, two dead goldfish cocooned in white fungus were floating in a glass bowl. The faces of the father, mother, and teenaged daughter were gray and emaciated...

On and on went the child's crying...

A smiling politician stood on the back of an open truck that stopped in a city square. He waved his arms in genial greeting to the crowd. Smiling broadly, he began to hand out small, black loaves, shaking hands with the people. Those at the back pushed forward. Four armed soldiers stood up beside the politician. A little girl scrambled on the ground for a loaf. A man punched her face and tore the loaf from her

hands. The angry politician pointed him out and the soldiers shot him in the back. As he fell, another man snatched the loaf. The crowd became desperate, faces drawn with hunger. A man tried to climb into the truck. A soldier shot him in the face from six inches. Somebody threw a brick. The politician's face turned to a snarl. The truck pulled away. The demented people tried to chase it. The politician ordered the soldiers to fire at them. They turned back, to fight like wolves for any loaves in sight...

The child's crying became louder...

Down the sloping rear of a hydraulic truck, corpse after corpse slid into the communal pit...

Suddenly the youngest man stood up, overturning the glass table, showering food and plates and glasses onto the floor. He easily evaded their drunken lurches and ran out of the salon. A beautiful girl, naked to the hips, moved through the greasy debris on all-fours, trying to cram white meat into her mouth. One of the men poured red wine on her back and shoulders...

And still the only sound was of the crying baby...

“Didn't you like it, Commissioner?” asked the anxious Mazzini, following them into the corridor. “Those were only the pre-credit sequences—the hero joins WFC and becomes a pioneer of marine-agriculture—we have some very good stuff with sharks—”

“I thought you might have,” the Commissioner said drily. “My only worry is the food orgy.”

“I think we've been careful to show them as elitist pigs. We even thought of making them cannibals.”

“Don't start any trends!” Half an hour later, the Commissioner put down the last of the documents Larson had brought from New York. “You're right, this needed the collusion of top people. Four hundred solid-circuits leave the microelectronics factory at Leipzig, yet only two hundred reach the Stellar Probe at Houston—and nobody complains?”

“Houston is held up so often on components deliveries they were grateful for two hundred circuits out of the blue.”

“Right. Get onto Leipzig for a copy of the original procurement authorization. Make it a routine stock enquiry; we don't want to cause ripples at this stage.”

“There's something else, sir. There was a man at Kennedy Airport, some kind of professor, he used this word Arcadia which occurs on some

of the documents. His name is Bruce. I ought to report, sir, that he bribed the airport staff with meat to—”

“Bruce? Bob Bruce?” snapped the Commissioner. “Tall, wild gray hair?”

“Yes, sir I felt it was my duty—”

“You did right, Larson. Bruce used to be very prominent in this building—never mind—you get onto Leipzig.”

“Yes, sir.” Larson began to put the documents back into his attaché case. “No, leave those with me,” the Commissioner said quickly.

When Larson had gone, he buzzed Schumann.

“Madelaine—you have any close friends in the office of Special Research Projects?”

“One of my dormitory girls works there—Annalise Koberstein.

“Would she be impressed if she met me?”

“She has your photograph pasted onto her wardrobe, she—”

“Tell her to come to your office—say you have a bar of chocolate. Don’t tell her she is meeting me. After that, get me Khomich; he’ll be at Army Brigade HQ in London. Then find out where George Richards is—I don’t want to speak to him, just his current location.”

He sat back, a faint smile showing his elation. The stealing of nine million marks in materials was no delusion—just what he needed to discredit Richards once and for all.

The trial would be fully networked. The death sentences would show that nobody was above the law. And the public would go on revering him, the one man who stood between them and anarchy, “The great protector.”

Chapter 5

That afternoon, he managed two lengths underwater in the little lake beside the ghost village. As always after a trip into the Scheduled Zones, his ears were still buzzing with the faint roar of unaccustomed noise. And, as always, the sadness he felt as he floated on his back in the warm water was almost tangible. That same blue sky stretched over all the crumbling cities and all the hungry, frightened people and here he was, totally alone by choice, yet full of nostalgia for the world he had abandoned.

That was when he saw it, at least two hundred feet above the lake meadow, a lone buzzard soaring gently enough to be hanging on a string. So good was his vision he could see the five fingers of feathers at the tips of the brown-barred wings.

Bruce began to paddle quietly to the bank. This was the first time he had known a buzzard to come so far south from the remote areas where many predators had escaped the toxic cycles, and he wanted it on film for the long winter months when he would be truly alone.

He did not bother to dry himself before pulling on his ragged denim shorts and thong sandals. He began to walk toward the decaying buildings of the dead village.

At first, he thought it was the same buzzing—he stopped and pressed his ears to clear them of water.

No—it was a motor!

He started to run. Any noise created by human agency meant danger in the Outlands.

By the time he reached the loft above the old church, the car was stopped at a trench he had dug across the track road leading to the village. It carried no markings or registration plates, a battered old Mercedes from the seventies.

One man was in sight, standing in front of the car. He had a cropped head. He was wearing army clothes. He seemed puzzled by the ditch.

Bruce took his bolt-action PS 656 hunting rifle from its canvas case and clipped on a magazine. The man beside the car had all the signs of an army or police deserter—without ration cards, they had nowhere to go but the Outlands. And with nothing to lose they were deadlier than

any wolf pack.

When he saw the butt of a pistol sticking up from the man's waistband, he raised the rifle and cocked the bolt. In the telescopic sight he saw a square, pink face; it seemed familiar.

The first bullet hit the dusty track to the left of the man's black boots. The second bullet raised a spurt of dust a few inches to the right of his boots.

Incredibly, the man merely hesitated, then started walking toward the village—holding his hands above his head.

The third bullet was close enough to throw dirt on to his black boots. He stopped.

"Professor Bruce?" he shouted. "I have a message for you. Can I speak to you?"

Bruce stepped forward into the sunlight at the gap in the stone wall. He cocked the rifle again.

"I can hear you."

"I have a message from Commissioner Towne."

"Why didn't he use the radio?"

"He wants to see you."

"He can go to hell. So can you. Turn around and walk back to your car and drive away from here."

"Look, Professor, my name is—"

This time the bullet screamed past his head.

His shrug seemed to admit defeat. He turned back toward the old Mercedes.

When the car was out of sight on the old main road heading west for Vaasa, Bruce put the rifle back in its Canvas case and climbed down the shaky wooden ladder. As his sandaled foot reached down from the last rung, something hard touched his bare back. He looked over his shoulder, his foot still in the air.

"Don't move, sir," said the fresh-faced young Englishman holding the pistol. "Please keep your hands on the ladder."

The car engine stopped and he was then allowed to step off the ladder and turn around.

Staff-Commander Andrei Khomich, WFC Security Department," said the burly man he had been shooting at.

"Khomich 'the Butcher'?"

Khomich nodded. His arms were strong and hairless, his presence

aggressively physical, not a tall man, but one who seemed to fill a great deal of space. The absence of emotion from his face was more intimidating than any scowl or sneer. He looked along what had been the village street. "You will get dressed and pack whatever clothes you need for a journey to Geneva, Professor Bruce. The Commissioner wishes to see you."

"Why did he send you? He can speak to me on the radio."

Khomich shrugged. "He knew you would refuse to come to Geneva. Please hurry with your preparations. I want to be back in Vaasa before dark."

"So you're the dreaded 'Butcher' Khomich mothers threaten their children with?" Bruce drawled contemptuously. "Well, this may be a new experience for you, but I am not trembling at the knees. And I'm not going anywhere."

Khomich looked him up and down. His small, blue eyes seemed amused. "What do you do up here on your own, Professor—talk to the butterflies and rob the bees of their honey?"

"Look, damn you—"

"We are leaving in ten minutes. Is there any water here?"

Bruce snorted. "Don't you recognize that wet stuff in the lake? No—I suppose all your liquids come out of plastic bottles."

Khomich turned to the young Englishman. "Fill the containers, Captain Robinson. Look out for hostiles."

"Yes," Bruce jeered, "it must make you jumpy, out here in the wilderness without a whole company of apes in helmets to protect you. Why did the Englishman say I was under arrest?"

"You are charged with food-bribery at Kennedy Airport."

"That young creep with the twitchy cheek! He did put in a report! My God, every time I meet one of my own species, I feel better disposed toward tapeworms."

Khomich nodded slowly. "You gave a child food and bribed officials to let the mother fly to Europe—yet you renounced a high-level position to live up here. You have a bleeding heart for one child, but the rest of humanity can rot for all you care—is that it?"

"They'll rot without my help—if all you policemen don't execute them first. Excuse me."

He walked away quickly, catching Khomich off guard. He caught up with Bruce as he was entering the door of a low stone barn. When his eyes adjusted from the brilliant sunshine, he saw rows of glass tanks on trestle benches, some brightly-lit, some in darkness. He bent down to

peer into one of the tanks.

“Bugs? Is that what you do up here?”

“Yes—to you they would be just bugs.”

“What are they to you, Professor—*friends*? You prefer them to people?”

“I prefer them to bureaucrats and policemen.”

Khomich watched him topping up large glass containers connected to the tanks by plastic tubing. Then he went up the rows, pouring a brown, treacly substance into saucers on the mossy floors of some tanks, into others dropping pieces of what Khomich realized was bad meat.

“This is research of some kind?”

“I’m trying to learn how these *bugs* communicate. It’s infinitely more rewarding than communication with my own species.”

“Where did all this equipment come from?”

“My old laboratory in the Brussels Institute of Biological Research. It was part of the deal when they let me come up here.”

“I am told you were highly-regarded—some even say you could have been a future commissioner.”

Bruce said nothing. “Your wife died and then Professor Richards was appointed chief-coordinator of SRP—is that why you decided to abandon the human race?”

“Go to hell.”

“You’re involved in this Project Arcadia, are you not? I am no scientist, but that sounds very interesting—”

Bruce shook his head. “Project Arcadia? Must be something new since I quit the department.”

“You mentioned it to Assistant Comptroller Larson.”

“What is Project Arcadia?”

“You can ask the Commissioner.”

Bruce stared at his tanks. His change of mind was abrupt—he started down the row, pulling every glass tank onto its side. Khomich saw some ants crawling across a trestle table. He grimaced, walking back to the door. “You’ll have to take your own chances,” he heard Bruce saying...

Before Bruce got into the car, now wearing his army jacket and cotton trousers, but still with the thong sandals on his bare feet, he looked up at the sky. The buzzard had gone.

Robinson drove, with Khomich in the front passenger seat. It was twenty years since the mass withdrawal of famine survivors to the

Scheduled Zones, and the unmaintained road was heavily pitted and cracked. So straight was it, however, they saw the old cart long before they reached the farm settlement by the dark forest of Scotch pines. Robinson slowed down.

“Are these people hostiles?” Khomich asked.

“We all tend to the hostile in the Outlands.”

“Will they attack us?”

“They’re a large family called Urkuts—they haven’t tried to steal anything from me for at least six months.”

Robinson pulled up about twenty meters from the old cart which was blocking the road. Khomich scanned the open meadow on either side. “They were probably hoping we would come back in the dark. Cover us, Robinson.”

As they walked to the cart Khomich sniffed. “Autumn is coming,” he said quietly. He looked across at the tumbledown farm buildings. “My people were just the same, stinking peasants. Offer them social justice, security, the chance to raise themselves out of the mud—and they spit in your face. They have been slaves to the land for so many generations they want to give it their blood.”

“It’s called the spirit of freedom, Khomich. This is the only place you’ll find it—in the Outlands.”

“Freedom?”

Robinson shouted behind them. Looking around, they saw four men rising out of a concealed ditch at the side of the road, one gray-haired, three young and brown-haired, all bearded. Two of them were carrying shotguns. They advanced slowly in a line. The old man shouted to Bruce. He listened, then said to Khomich, “If we give them the car and your weapons, they’ll let us walk to Vaasa.”

Khomich shrugged. Stepping in front of Bruce he held up his hands, apparently conceding defeat. “Okay, Robinson,” he said pleasantly, “I will do a three count. Keep talking to them, Professor.”

Bruce shouted in Swedish. The four shaggy men nodded among themselves, faces registering success.

“One, two, *three*,” Khomich said loudly.

Robinson dived to one side, flattening himself on the road. Khomich had his pistol out of his waistband and had shot a young man carrying a shotgun before the others knew what was happening. Robinson shot another and rolled quickly off the road into the meadow flowers, firing again.

Khomich went on shooting from a standing position, right arm fully

extended. taking careful aim for each shot. Khomich went on shooting from a standing position, right arm fully extended, taking careful aim for each shot. Standing close beside him, Bruce could see no vestige of emotion or excitement on his face.

When the four Urkuts lay sprawled on the road, he walked slowly toward them, right arm still extended. Robinson got to his feet. Khomich motioned for him to join Bruce. They both watched while Khomich quickly and methodically put a bullet into each man's head.

"They did ask for it," Robinson said reproachfully.

"I did you an injustice, Khomich—you don't need anybody to do your killing. Congratulations—I don't imagine their women and children will survive the winter."

Khomich stretched his legs and let his palm feel his cropped fair hair. "That is the way of things, Professor. While you are playing God to your bugs, the rest of us are fighting a war of Survival."

"I pray to God you lose, Khomich."



Khomich went on shooting from a standing position, right arm fully extended, taking careful aim for each shot.

Arcadia

Nobody took any risks that night. As soon as darkness fell, they heard the tawny owl. The dewfall was so heavy it made the nylon tents sag.

“Do you honestly think we could survive permanently in this environment?” Anne asked, her voice muffled by the sleeping bag which she had zipped up to her nose.

“We don’t know all the genetic factors yet, but I’m sure reproduction will be possible. The cost of the initial Crossover is the prohibitive factor—we will have to choose only the genetic cream of the existing population. That’s why the whole project has to be kept secret until we can present it to the Supreme Council as an accomplished fact—Towne is a sentimental populist; he would veto Arcadia out of hand simply because the whole world population could not cross over. But, once we show the film, the Supreme Council will see it my way—this is our only chance of survival. What point is there in using up our dwindling resources keeping millions of unproductives and degenerates alive? No species can survive unless it can adapt; evolution has taught us that. But we can be masters of our own evolution!”

“I’m freezing, George. Can I come into your sleeping bag?”

“Towne will be overruled; the Supreme Council will back me; we will clear special areas to establish colonies; we will have a phased program for...”

His voice droned on relentlessly. From the vast darkness outside she heard a terrifying array of sounds, not just the soft hooting of the owl, but the thin screams of bats, clickings, rustlings, scurryings, all coming from a seething night world which she now regarded as a real, tangible hell. Even as she turned over, she was sure she could feel millions of small, demonic creatures wriggling and twisting in the soft humus beneath the nylon floor of the tent...

Chapter 6

Bruce sprawled in the Commissioner's chair at the top end of the long conference table, his sandaled feet up on the shiny green marble. He brought what looked like a strip of greasy leather from his jacket pocket and tore off a Sliver.

"They are very strict about food regulations in this building," Khomich said quietly.

Bruce smiled. "Makes you nervous, does it, any food not produced by enzymotic chemistry? The truly modern man—Khomich—a legal murderer who is frightened of bacteria. Tell me, Khomich, why don't you—"

"Why don't you keep quiet?"

"The cyborg has a temper! You know what a cyborg is, Khomich—a cybernetic organism, an exogenously extended organization complex functioning as a homeostatic system. Blessed are the cyborgs, for they have inherited the earth. Congratulations."

"Shut up!"

Bruce prised a shred of flesh from his eye-teeth, using his thumbnail. "So, here I am, back in the heart of WFC. Nothing seems to have changed much—Towne is looking older—"

"That's because I *am* older," said the Commissioner. He was standing in the connecting doorway, behind him the young bureaucrat Bruce remembered from Kennedy Airport.

"The great man himself," Bruce said ironically. "Here we are at the heart of the great crusade to save humanity and what do we find—bureaucrats and killers! A wily old politician and an ape who could not make a short trip into the Outlands without wiping out a complete family settlement." He stared disdainfully at Larson. "And a dessicated creep who likes to see children going hungry. Three dedicated saviors of humanity!"

"I see you haven't mellowed, Bob," the Commissioner said pleasantly, taking a seat halfway down the table. Larson closed the door and stood behind him. "Larson—tell us the professor's exact words as you heard them at Kennedy on Friday."

Larson blushed. He now had strong doubts about coming directly to

the Commissioner. The whole thing was bigger than he had imagined—and if Professor Richards and other senior WFC executives were planning a shake-up, he could not see Towne winning. The man looked positively ancient.

“Professor Bruce was referring to bureaucrats—he meant administrators. He said, “Your type won’t be happy until you produce a blissful Arcadia where you have the world population caged and numbered. He also said I should report him to Chief-Coordinator Richards.”

“You say that, Bob?”

Bruce shook with soundless laughter. “So the great crusade leader fills his world-saving days with spy reports on the latest airport lounge small talk?”

“You deny using the word Arcadia?”

“Deny? Is it important? Should I have said heaven—or paradise? Are you arresting people for illegal vocabularism?”

“Take a look at this list of equipment. Does it mean anything to you?”

Bruce looked down the first sheet, shaking his head. Something on the second sheet made him frown.

“Any discernible pattern to that stuff??” Towne asked.

“Some of it you’d need for a biology lab—but there’s also stuff that looks more to do with the Outer Space program. Titanium—you wouldn’t want two tons of that for a biology lab.”

“What would you want it for?”

“It’s lighter than iron, but twice as resistant—better than steel, practically immune to corrosion—melting point: one-seven-two-five degrees centigrade.” His hard, tanned forefinger ran down the list. “Micro-lenses, infrared spectrometer—and all these micro-electronic circuits—a helluva lot of computer hardware—if it’s a biology lab, it’s doing some pretty advanced work. What’s this all about, Towne?”

“All that stuff was stolen. There’s some kind of conspiracy to do secret research—why, I don’t know. What I have to establish is whether you’re involved, Bob. It seems to have a code name—Project Arcadia.”

“And you had me dragged all this way because I happened to use the word accidentally?”

“Not entirely. You were joint-deputy coordinator of SRP. You gave up the post for reasons I never fully believed in—I do know you make no secret of your contempt for me. Your consultancy status was authorized by George Richards—whom you claim to detest—and it gives you freedom to travel around a lot of secret SRP establishments. *Then*, just as

Larson here stumbles on what looks like a major conspiracy, you happen to be in Kennedy Airport, bribing officials, using the very code-word for the project. He says he'll report you and you tell him to contact George Richards. You blame me for being suspicious?"

Bruce grimaced wearily. "I've had no personal contact with Richards since I walked out of this building three years ago. What happens now—your pet stormtrooper going to give me a lie-test with his boots?"

The Commissioner stared at him. Then, without looking around, he said, "Larson, I want you to fly immediately to Johannesburg. You'll ostensibly be doing a routine audit of the zonal Budgetary office—in fact, you'll be looking for the original procurement order for the titanium on that list. We need first-hand evidence and any authorization of that magnitude will have been double-checked against forgery. Schumann will have your travel papers ready in half an hour. Contact me when you've found it—and whatever happens say nothing of this to anybody. Understood?"

"Yes, sir."

"And Larson—when you return, I will have promulgated your upgrading, you've proven you can handle a lot more responsibility."

"Thank you, sir."

Larson left the conference room, cheek twitching uncontrollably, but this time from pleasure. The Commissioner nodded for Khomich to sit down.

"Bob, he said, "I've just had a report of a ten percent rise of rickets among child factory workers in Korea. We have to make them work three hours a day because of manpower shortage—they're suffering from poor nutrition and lack of sunlight. A Crash Aid program means some other zone taking a cut, probably in Japan. This evening, I'm going on the European network to explain why we're having to cut down all ration entitlements for a period of one month—it may very well be longer. We expect large-scale rioting. Bob—you remember the first years of the famine?"

"That's a stupid question."

"A lot of people died who could have lived—there was still a lot of food being hoarded in national stores. I'm hounded by memories of corpses piling up, Bob—ordinary people who died through greed and selfishness. That's why I am totally ruthless about fighting for our policies of fair distribution. In eleven days, I will be asking the Supreme Council to sanction the biggest budget of WFC's history. A lot of people are beginning to make greedy noises, Bob. This would be a helluva good

time for disruptive elements to break up the organization. Now—my *only* concern is to keep WFC together until our scientists get the breakthroughs that will produce food surpluses, when *all* women will be allowed to have babies, when—

“I know the sermon, Towne. What’s it got to do with me?”

“All that stuff was systematically stolen over the last fifteen months. It seems to be for what some SRP staff know as Project Arcadia. But Project Arcadia appears on no budget approval list, there is nothing in the data banks, the SRP staff know only that it is top secret and that George Richards handles it personally. Now—on top of everything else—George Richards has more or less disappeared. He left this building for Paris eight days ago—he then flew to London, but nobody knows where he went from there. What does that suggest to you?”

“Richards stole all this stuff?”

“It could only have been done with his authority.”

“I’d say he’s made some kind of discovery and wants all the glory for himself. I always warned you he was a one-man band.”

“He’s devious, monumentally arrogant, and loyal only to himself. He’s also a genius. That’s why I made him chief-coordinator, I knew that the WFC had to contain him, or he would be a constant source of trouble.”

“Didn’t I say he’d make trouble anyway?”

“Bob—I know you think I’m just another devious, power-mad politician, but surely you agree with my policies?”

“You say the right things, but politicians always did. It was what you did behind closed doors that fouled up this planet, you and the industrialists and the military, all of—”

Khomich slapped the marble table. His small eyes were hooded with anger. “Did soldiers and politicians breed these germs that swept the grainfields? I do my killing face to face. I never made money working for the chemical monopolies; I never brainwashed ignorant peasant farmers into drenching their fields with indestructible toxics that poisoned the rivers and the seas. You keep quiet about soldiers and politicians, Mister Bugs Professor!”

“Thus spake the loyal butcher,” Bruce said quietly.

For a moment Khomich looked furious enough to launch himself up the table.

“We all share the blame,” Towne said, in the tone of a pronouncement. “Bob—whatever you think of me, you know that I stand for keeping people alive—all the people. Suppose this Project Arcadia is part of a conspiracy by George Richards and others in this

building to get me out of office?”

“I wouldn’t be surprised. Backstabbing is what you people thrive on.”

“Do you want to prove you’re innocent of any participation in the conspiracy?”

“How the hell can I prove it?”

“Help me find out what Richards is up to. Is that stolen stuff meant for some weapon or invention that can be used against WFC? You’re a scientist, you—”

“Help you play power-politics? No thank you.”

“Don’t you care what happens to WFC?”

“Not a lot.”

“I see.” Towne drummed his fingers on the marble. “Well, I have no time to be subtle. I must know what Richards is up to before the Supreme Council session. I cannot use normal investigatory channels because it is possible Security Secretary Khouri is part of the conspiracy. You know your way around the whole SRP set-up and you have the scientific knowledge to evaluate Project Arcadia. Other scientists will speak to you where they would clam up against Staff-Commander Khomich. You also have the supreme advantage of having no career to promote. If I cannot appeal to your sense of humanity, I must appeal to your sense of self-preservation.”

“What the hell does that mean?”

“I could have you charged with food-bribery. The Survival rate among ten-year men in the permafrost construction camps is roughly fifteen percent—nobody has ever lived long enough to die of old age.”

“You’d do that?”

Towne nodded.

Bruce tore off a sliver of dried meat and chewed slowly. “You certainly know the shortest distance between yes and no, Towne.”

Towne smiled. “You can use the emergency Control Room, there’s a Gamma Five digital computer there. I’ll send you a reliable operator named Annalise Koberstein; you can screen up anything you need from all WFC data banks, personnel records, and so forth. One thing I’ve noticed—a lot of that stuff seems to have gone through Le Havre or Cherbourg on its route. Maybe they’re using an existing SRP establishment. You have access to me night or day—don’t use the video-link. Schumann will draw up blanket security and travel clearances to cover you both for any part of the—”

“You mean I have to work with him?” Bruce snapped, glaring up the table at Khomich.

“The staff-commander doesn’t know anything about science and you are no expert in security operations. I trust you both implicitly—perhaps for different reasons. Jointly you should function very well. Remember—total secrecy at all times.”

The Commissioner went back to his own office. They stared at each other.

“So—you are back with the human race,” Khomich murmured.

“Let’s get one thing straight, Khomich, you and the human race can fall down a hole. I’m only doing this rather than have that kindly old idealist send me to a death-camp.”

“We all have our weak spots,” Khomich said cheerfully.

“**Y**ou wanted me, Commissioner?” asked Madelaine Schumann.

“Yes. I want you to send a directive to the WFC security Department at Tripoli. Use Security Secretary Khouri’s personal code-reference; they won’t dare question any order from him.”

Schumann got ready to copy down the directive.

“No, do this by memory only. I want Assistant Comptroller Larson taken off the Johannesburg shuttle and held in maximum custody pending investigation into unspecified charges. Until further notice he is to be allowed absolutely no communication with anybody.”

“He seemed a nice young man,” Schumann said reflectively. “Boring perhaps, but he did come directly to you, did he not?”

“Yes—to help his career. Given time to think he might decide he chose the wrong side. I could see it in his eyes—he thinks I’m *old*. His accountant’s brain will be telling him that George Richards is a better bet from a career point of view.”

“What do you intend to do with him?”

“I don’t have to explain myself to you!”

“Sorry, Commissioner.”

“And get that snifty look off your face! This isn’t simply politics. To depose me, Richards will have to eliminate me! I cannot afford sentimentalism—I am fighting for my *life*! Larson knows too much. What happens to him is irrelevant.”

Arcadia

“George—we’ve got to go back. This isn’t proving anything—”
Richards stared at her icily, then turned his back.

“George—”

“You can go back if you like,” he said indifferently.

As always, Magruder felt it necessary to intervene.

“Anne cant really go back all that way on her own, George.”

“You go with her, then! I don’t care what you damn well do!”

“We should radio Control—”

“You stupid woman! If we radio for help every time we have a little setback, we’ll make a mockery of the whole project!”

“A little setback?” Anne said incredulously. “A man is dead, George—”

“Miloblenska was a fool. But his death was useful—if everybody has learned a lesson from it.”

Magruder touched Anne on the shoulder. He smiled comfortingly. “Yeah, maybe I should take you back, Anne.”

Richards clenched his fists in exasperation, staring up at the huge sky. “Go then, damn you. Go!”

Chapter 7

After an initial handshake, Bruce and Schneider walked in embarrassed silence along the shabby mess that had once been London's fashionable Bond Street. The last time they had met, at a bitter WFC policy sub-committee, Schneider had been just another of the stodgy, complacent bureaucrats whose arrogance and incompetence had finally driven him to renounce his fellow men. Now Schneider was sad and wasted—the handshake might have been that of a bedridden old woman. What was there to say?

Passing the rusting car bodies and the boarded fronts of what had once been expensive tailors and jewelers and antique shops, they approached a small crowd of beggars at the restaurant entrance. Facing them impassively was a green-uniformed Security Guard, his right hand resting on the holstered butt of his automatic pistol. Hungry eyes appraised their clothes and dismissed them.

"Citizens' food hall that way," snapped the guard, jerking his thumb as he saw Bruce and Schneider easing toward him through the apathetic group—among whom Bruce was slightly shocked to see several young-looking women. Bruce fumbled in the pockets of his old army jacket and produced a white card.

Immediately the beggars and whores were galvanized. As the frowning guard examined the card, young-old men produced the treasures they had saved throughout the famine—jewelry, gold ornaments, watches—thrusting these forward into Bruce's face. Through the clamor of voices and waving arms, Bruce had a momentary glimpse of a woman's pale face. Seventeen or forty-seven, there was no way of telling; she stared at him with an expression that was supposed to be enticing.

"Save me your scraps," she called to Bruce in an educated English voice that was intended to be seductive. The underlying tone was of stark fear. And then they were through into the decaying opulence of the restaurant.

It was a spacious room, still adorned with a chandelier, its tables and chairs and gilt-edged mirrors still pretty much as they had been in the bustle of pre-famine London. But there were no tablecloths and here and

there the carpet was worn through to threads and bare wood. Throughout hung a strong smell of damp. As Bruce moved through the tables toward the solitary waiter, three WFC executives rose from their table. With no heating, they had worn their raincoats through the meal, the same black raincoat Larson had been wearing at Kennedy Airport, the uniform of the well-nourished elite. They gave Bruce and Schneider a quick, curious appraisal, but said nothing.

The shirt-sleeved waiter watched them disdainfully, making no secret of his suspicion. Then Bruce showed the white card. The waiter raised his eyebrows. With a shrug he gestured for them to take their pick of the empty tables. Before they sat down, he turned toward the open doorway to the kitchen and shouted, "Meal Two for two!"

Not until they had been seated for several minutes did Schneider relax enough to speak, apparently reassured that they were not to be thrown out. "It's a long time since I had a Grade One meal, Bruce. You remember that creep Eisentrager? He brought me here once. I always knew he'd crawl his way to the top. Towne likes yes-men.

"Is that why you got canned?"

Schneider shrugged noncommittally, watching the waiter coming toward them with two plastic jugs.

"Only genuine wine-substitute served here," the waiter said sardonically. "What's it to be, gentlemen? If you want some inside information—the red has more calories." He smiled. "I don't say you'll put on weight, but..."

Bruce took a sip of the red from his plastic glass. He screwed up his face, shuddering slightly. Schneider finished his glass in a gulp. Bruce pushed the other glass toward him. He drank that with a slightly less desperate gulp.

"So, Bruce—what do you do up there in the Outlands?"

"I have a makeshift lab—"

Schneider was too tense to listen. "I got canned for incompatibility," he interrupted. "I wasn't on my knees often enough to suit George Richards."

"Talking about Richards..."

Bruce stopped as the waiter came back with two plates on a tray. He frowned as the waiter slapped the plates down on the table. The food was highly-colored and unidentifiable.

"What is it?"

The waiter seemed to enjoy his little routine. He gestured grandly, adjusting an imaginary towel over his left arm.

“You really want to know? It’s what we used to sling in the bins.”

Schneider was already spooning luridly-colored portions into his mouth. Bruce watched him, trying not to let his disgust show. Then he said, casually:

“Arcadia mean anything to you, Schneider?”

Schneider looked up quickly. Then he shook his head.

Bruce sat back, pushing away his technicolored lunch. Between gulped mouthfuls Schneider kept looking at Bruce’s plate, then at Bruce. There was so much fear in the man Bruce could not be sure about his reaction to Arcadia.

“I’m not hungry,” Bruce said casually. Their eyes met. Bruce nodded. Before Schneider’s hand reached Bruce’s untouched lunch, Bruce pulled back the plate.

“I asked you about Arcadia.”

Schneider looked this way and that, licking his lips with nervous sweeps of his tongue. “Who are you working for?”

“Towne.”

“Christ.” Schneider looked round. The nearest WFC bureaucrats were three tables away. He hunched forward over the table. “You know what Richards is like. If he heard I—” his voice fell away. He was terrified, yet his eyes could not stay long from Bruce’s uneaten portion. “Okay—but I told you nothing—right?” Bruce nodded imperceptibly. Schneider’s words came quickly, almost too quietly to be audible. “Check with Personnel—look for SRP people who’ve been given Rest and Recuperation.”

His fingers gripped the plate, but Bruce’s strong, brown hand retained its hold. Schneider lowered his head, rubbing his forehead. “And check which Rest Center they were sent to.”

Bruce watched him for a moment, then released his hold on the plate. Schneider started eating.

“Thanks, Schneider,” Bruce said, standing up.

On his way out, he told the waiter to give Schneider another beaker of substitute wine. Outside, the beggars and whores went on jostling him until his long stride left them far behind. He found it easier if he did not look at their faces...

When Bruce arrived in the video-link room on the top floor of the Quai d’Orsay, WFC’s Paris Building, Khomich was already talking to Towne on the scramble circuit.

“...but you check with me first, is that clear?” Towne was saying.

“Yes, sir—here is Professor Bruce.”

“Hello, Bob. Khomich tells me you’ve made some progress.

Bruce held up a sheet of paper. “I’ve been down in Personnel Records—I told them I was checking backgrounds to pick staff for a new research program of my own. This is a list of people who are currently out of circulation through various stress conditions. Mostly scientists and research workers, plus some construction and communication engineers. All these are at a Rest and Recuperation Center—an old mansion near Caen. One interesting thing—Richards personally authorized all these rest cures. Another interesting thing—according to records a lot of people have been dying at this place—at least ten in the last year.”

“Is it one of our establishments?”

“It used to be called the Sebastian Institute—WFC inherited it from the old French Government. Over the years, it’s been used for botanical research and for a study program into climatic changes. Then, about eighteen months ago, the Zonal Council here was informed that the house was being converted into a Rest Center—by the Office of Special Research Projects, Geneva.”

“Richards?”

“Yes. It would be a good cover for a secret operation—he can send anyone there for an unlimited period on the grounds of stress; it’s near enough Caen for scientific personnel to be lost in the crowd; there are three active SRP research establishments within a forty-mile radius, which means trucks could be diverted without special journey-dockets—and it’s big enough, about fifteen acres of ground and a thirty-two bedroom country mansion.”

“Those deaths sound interesting.”

To get back in view, Khomich came near enough for their shoulders to be touching. Bruce conquered a shudder of revulsion.

“It is in a Classified Area, Commissioner. There is also an SRP instruction that Security clearance is required to visit the establishment.”

“He’s put a shield round it,” Towne said. “Nobody must know we are interested in the place—nor that I am involved. Think up some story—you could tell Zone Security that Professor Bruce is making urgent field tests on a new virus mutant—you’re escorting him and you need a small detachment of Special Duty soldiers because Bruce needs to travel into the Outlands of the Gironde. You can requisition a helicopter and arrive

without warning. The vital thing is to get at Richards before he has a chance to communicate with anybody. Bob—I've given Khomich his instructions—it's up to you to find out what the hell they are doing at this place."

"Did your instructions cover the amount of force Khomich is to use?"

"Create as little disturbance as possible—just get hold of Richards. You'll be bringing him back to Geneva, but make it discreet."

"Khomich's idea of a little disturbance usually ends up with a pile of dead bodies. These people are scientists, Towne, they may have diverted some equipment, but that doesn't make them enemies of mankind."

"I think Staff-Commander Khomich knows the situation, Bob. One more thing—I had the Richards' residence checked—his wife Anne is seemingly with him. It may be as well to bring her back with Richards—she's a doctor of medicine, she probably knows as much as he does."

The Commissioner went off vision. As Khomich locked the door of the video-link room, Bruce frowned at him. "What instructions did Towne give you?"

"You heard—to make sure Richards has no chance to communicate with his friends. If there is to be a purge, none of the conspirators must have advance warning—

"Towne always was a devious bastard, but he didn't use to be paranoid."

"That is not true. The Commissioner knows what he is doing."

"Let's hope all this isn't simply your hero making sure of his own job, Khomich. I would hate to see your noble sense of idealism taking a knock."

Khomich allowed himself a small grimace. "I have always found scientists to be of childish mentality."

They handed in the key and took the elevator to basement level, where Khomich became only one among the hard-eyed men wearing green Security or black Army uniforms. Yet even here he was regarded as something special, all eyes resting on his face a fraction longer than was necessary. For a brief moment, Bruce enjoyed a feeling of vicarious notoriety—the man who walked with "The Butcher"—but that made him angry with himself. Those clean, peasant-strong hands and those quick blue eyes had presided over too many deaths—*grisly* was the only word for the man.

They met Captain Robinson and then went to the office of the London Area Brigade Commander to ask for a small detachment of SD troops and a helicopter. While Khomich was talking to the brigade major,

Bruce stood beside Robinson looking at the wall map of western France.

"I always thought you'd hear the screams of innocent people in a place like this," he said cheerfully.

Robinson frowned. "It isn't like that at all, sir. Our job is to—"

"You been with Khomich long?"

"No, sir, only since last week."

"You looking forward to a long, grisly career with him?"

Robinson's cheeks flushed.

They took off from the helicopter landing area on the right bank at dawn. Bruce found himself sitting among the six black-uniformed SD soldiers in the rear. Khomich and Robinson sat together up front. From snatches of conversation, Bruce gathered that the soldiers hated the green uniforms of WFC Security. He closed his eyes, trying to shut out the uniforms and the weapons and the brutalized faces.

Arcadia

In the severe humidity caused by evaporation of heavy dew, first Kessel then Carrere began to stumble as they struggled across a rough patch of wet soil. Then Kessel's knees buckled. Groebli knelt beside him.

"He's in a coma, George. You'll have to radio Control and get us lifted out."

*"Don't you understand **anything**? This is exactly why we are here—to learn how to survive."*

*"George—he could **die**."*

"Do something for him."

"I can't do anything for total exhaustion. Look at him—he won't last much longer—"

That was when the deep purple sky was suddenly eclipsed by a huge, rushing, terrifying darkness. For a brief moment they saw only the shine of gigantic claws and then they were all running in different directions...

Chapter 8

They came in over the treetops, circling the big house once, seeing only walled gardens and greenhouses and a small pond beside some trees before they came down.

As soon as the old twin-prop troop carrier touched the gravel drive in front of the mansion, Khomich and Robinson ducked out under the scything blades. Bruce pushed in front of the black-uniformed soldiers, his gray hair flying about his face as he straightened up beside Khomich. If nothing else, he might stop them from killing anybody.

As they approached the porch columns, the door opened and three men stepped out, two of them in white laboratory coats. Bruce recognized the other one immediately, a small, slightly-built man with a few strands of white hair and a small beard.

“Doctor Jany, isn’t it?” he said.

“Yes—what is the explanation for this intrusion?” demanded the small Frenchman. “Who are you?”

“My name’s Bruce—I used to run the Biology Institute in Brussels.”

“Oh yes—Professor Bruce. You sat on the Enquiry Board which vetoed my project. What are you doing here with these soldiers? This is a Rest and Recuperation Clinic, we cannot have—”

“Major Wollaston—take control of all communications,” said Khomich, pushing past Jany into the paneled hallway. Jany ran after him, face red with anger. “You have no authority, I forbid you—”

Bruce put his hand on Jany’s shoulder. “Staff-Commander Khomich has all the authority he needs, Doctor. I wouldn’t try to obstruct him.”

“What authority? Why are you here?”

“Project Arcadia, of course.”

“What project? What are these soldiers doing?”

“Taking charge of your communications,” Khomich said, watching two black-uniformed SD men disconnecting an old-fashioned PBX switchboard while two more SD men manhandled its elderly operator against the Oak-paneled wall. “Now,” Khomich said, “show us this Project Arcadia.”

This is a Rest and Recuperation Center! I must insist—”

“According to personnel records in Paris, you’re looking after thirty-

eight rest cases here,” Bruce said briskly. “You keep them all indoors on a fine morning like this?”

“They are under medical care; they must not be disturbed. I order you out of this building—I will make the strongest complaints to my superiors.”

“Who are your superiors?”

“I refuse to answer any more questions!”

Khomich nodded. He strolled across to a large carved stand on which stood a bell-shaped glass case. Inside the case, artistically mounted against a background of ferns and flowers, were scores of stuffed hummingbirds in flight. He nodded appreciatively at the brilliant plumages of the tiny birds.

“Look, Jany,” Bruce said quickly, “you can either show us everything or Staff-Commander Khomich will conduct his own guided tour—and he rarely bothers to knock.”

Jany shook his head.

“Is George Richards here?” Khomich asked.

Jany’s mouth tightened.

Khomich hooked his right boot round the foot of the carved plinth, then gave it a vicious jerk. The bell-shaped case tottered at an angle, then hit the tiled floor. The glass shattered. Dried leaves and stuffed hummingbirds spewed across the tiles.

Jany stared at him in horror. Then his shoulders fell. He looked at Bruce. “I appeal to you as a scientist—these soldiers have no place in a research establishment—send them back to their helicopter and I will discuss this with you—”

Khomich shoved between them. “There will be no discussion. On the authority of the Commissioner I will search this building.”

Jany closed his eyes and sighed. With a little shrug he said. “Oh well, it had to come sooner or later.”

Bruce and Khomich followed him into a dimly-lit corridor, Khomich using his elbows to make sure he was never more than one pace behind Jany. They entered an old-fashioned library. The sight of so many leather-bound books, on shelves that went all the way up to the plaster moldings of the ceiling, made Bruce gasp. In a world where books were considered at best to be irrelevancies, a collection like this was surely reason enough for the secrecy surrounding Arcadia. But he was given no time to inspect the shelves.

Jany pressed a button under the light-switch.

A concealed door slid soundlessly open and they were looking into a

huge, split-level studio full of Cameras and laboratory equipment. People in white coats stared as Jany led them across the floor. Jany led them up a short flight of stairs to an upper-level platform facing out over the rear gardens of the mansion. Immediately below was the domed glass roof of what appeared to be a small conservatory extension. On the raised platform several technicians were at work, one using what looked like a periscope scanner, others speaking to faces on video-screens.

“Still no contact, Doctor,” a woman said without looking up from her console.

“Thank you, Jeanette.”

Jany gestured at the view beyond the huge plateglass windows. Bruce saw a wide, uncut lawn and then a sloping rockery or rock garden. Beyond that were shrubs and ferns and then trees in a large overgrown garden surrounded by a red brick wall.

“Well—there is Project Arcadia,” said Jany.



"Well . . . there is project Arcadia," said Jany.

Khomich looked down at the mass of equipment on the floor beneath them. "Does this look like the stuff on the list, Professor Bruce?"

"Could be." Bruce peered out over the garden. "*That's* Project Arcadia?"

Jany grimaced. "I will have to explain—"

"Getting him now," exclaimed the woman he had called Jeanette, pulling down an RDF wheel.

Jany picked up a hand-mike. "Control to Richards. We are hearing you faintly. What is your position, over?"

Through a dull-roar of static, they heard a small, urgent voice.

"Richards to Control, Richards to Control, Mayday, Mayday, Mayday..."

Into another speaker, the woman operator said, "Control to Recovery, take a bearing on this transmission, Professor Richards on Channel B. Status Red Alarm, over."

"Control to Richards, what is your current position?" Jany said into the hand-mike. He was frowning. "Why isn't he using the pack-set? Try Carrere on Channel A, Camisa."

"Tell Recovery to scatter-drop LS capsules in the general area of Crossing Two," Jany said to the woman operator.

"Was that Professor Richards?" Khomich demanded, peering through the huge plate-glass windows. "I cannot see him."

Jany used the hand-mike again. "Control to Richards. Capsules now being scattered around Crossing Two—transmit for fix, over."

"Richards to Control, I am hearing you now. I am roughly south of Crossing Two. We were heading for Station Three to be lifted out. I have lost contact with the others. They may have crossed to the north side of the stream. You must scatter-drop LS capsules. Get somebody with a rifle to—"

For a brief moment, they heard an upsurge in the static—then a dull, acoustical silence.

"Recovery couldn't get a bearing, sir," said the woman operator. "He's probably too low for them—our Grid bearing is south-line five-two. Capsules have been dropped."

"We were lucky to pick him up on a personal communicator at that range."

"Is Richards taking part in some kind of simulated stress experiment?" Bruce asked patiently. Jany shook his head.

"Ask Recovery if they've seen any big birds—they must be shot immediately."

"They're looking now. It must have come in from the south, through the trees at the pond."

"We must speak to Professor Richards' *immediately*," Khomich said. "Where is the door to the garden?"

"Nobody is allowed out in the garden, it is too dangerous, said Jany.

"Dangerous? What have you got out there—tigers?"

"I will explain in one moment. Camisa—be ready to take cross-bearings if he transmits again. Keep constant surveillance of both channels."

"Yes, Doctor. You think Professor Richards is testing the emergency procedure we were discussing at the last planning committee?"

"I hope so, but we will presume it is for real." He turned to Khomich and Bruce. "If you will come with me."

They followed him down the steps to the ground-level. He stopped at a brightly-lit model garden on a stand. His finger hovered above tiny replicas of grass and stones and trees and shrubs. "Richards is on an acclimitization exercise," he said. "His route took him across this lawn, down this short rockery slope—across this open ground—his party was heading originally for Station Four—" He pressed a button on a small panel. A light came on under a tiny glass canopy in one corner of the model garden. "But now he seems to be in this section—" His finger indicated an area close to a small stream running into a miniature glass pond among some model trees.

Bruce saw that Khomich was ready to explode. He took Jany's arm. "We don't know what the hell you're talking about, Doctor."

"I want Professor Richards here immediately or my men will go out there to find him," Khomich snapped, "I don't care what stupid scientists' games you are playIng."

"I will take you to Richards, Jany said calmly.

They followed him through the big house. Through half open doors they saw people working in laboratories and workshops. Jany stopped at a steel door. Above it was an illuminated sign: CRYOGENIC ROOM—NO ADMITTANCE. Jany pushed a serrated plastic card into a slot on a control panel. A green light came on above the door, which slid open. They stepped into a brightly-lit room with a low ceiling. The air was cold. The door closed behind them. Jany went to a large instrument console and started pressing switches. The room's lighting dimmed, to be replaced by a low, pinkish glow. He punched a series of numbered buttons.

From a bank of what looked like large filing drawers began slowly to emerge a long, metal cabinet.

The room seemed to become even chillier.

They looked down into the cabinet.

"You wanted to see George Richards," Jany said with a little sweep of

his hand.

“He’s dead!” Khomich exclaimed.

Bruce frowned. George Richards’s eyes were shut. The interior of the cabinet was lined with a shiny metal. The naked body was submerged in a thick, opaque liquid—only the face above the surface. Clamped to every part of the head and body were thin gold wires. The face was deathly pale. There was no sign of breathing.

“You will understand cryogenic techniques, Bruce,” said Jany. To Khomich he said, “He is not dead. He is in suspended animation—on ice you might say.”

“But if that’s Richards—who did we hear on the radio?”

“That was George as well.”

“I am putting you under arrest,” Khomich said firmly. “All operations will cease immediately—we will radio for doctors—”

“Why don’t you see all of Project Arcadia before you do anything stupid?” Jany snapped.

“I have seen enough—”

Bruce shook his head. “The Commissioner’s instructions were to evaluate the entire project—we want to see everything. He followed Jany back to the instrument panels. Jany pressed two switches. The metal cabinet slid back into the wall. The lighting returned to normal.

“Life support systems?” Bruce asked, looking at the dials and electrographs.

“Yes—we have seventeen guests in deep-freeze at the moment. All bodily functions are monitored and controlled by this analog computer—it can react automatically to a very wide variety of input variables. The technique was evolved at Houston for the Stellar Probe project. Our longest resident has been here for three months. As far as we know, there is no reason why suspended life could not be maintained indefinitely—even past the normal life span.”

For the first time, Khomich looked doubtful. You have *seventeen* people—in these cabinets?” Bruce asked.

“You will understand when you see what else we can do.”

“Is that titanium lining the cabinets? I wondered why you needed two tons of it.”

“So that’s how you got onto us? We always knew there was a risk of somebody checking on the missing materials.”

“It came out in a routine stock audit. How long has all this been going on, Jany?”

“About two years. We went operational six months ago. Now, if you

will come this way.”

“When I sat on that Board you were working on genetic engineering. Has it anything to do with that?”

“You will see. As a scientist, you know how obsessive we can be.”

“So when we vetoed your pet project, you simply carried on illegally? And Richards backed you because he’ll do anything to prove he’s bigger than the WFC administration. Who else is involved?”

“All of us here are deeply involved.”

“I mean at top level.”

Jany shrugged. “I do not know if George told any of his senior colleagues—everyone here took a vow of secrecy. Here we are—the clinic, as we call it.”

Several people in white coats looked at them with unmistakable hostility. “Mary—can you operate the projector for us?” Jany said to a dark-haired girl who was working what Bruce recognized as an infrared spectrograph. They went into a small room. Jany pulled out chairs in front of a screen. “We’ll go through the whole sequence, Mary.”

The lights dimmed. The first slide came up.

“Recognize that, Bruce?”

“It’s a single cell—human?”

“Right. From the liver of an adult male.” The second slide was of two identical blobs. “The single cell has replicated—these photomicrographs are all of the same culture. You know anything about cell-cloning, Bruce?”

“I know it was banned.”

“All scientists are branded as heretics at some stage—if they are any good. This is known as cell-cloning, Staff-Commander. I’ll try to explain in layman’s terms. We have about fifty million million cells in our bodies. Each contains the twenty-three pairs of chromosomes which carry the full genetical blueprint for our physical entities. Normally, reproduction starts at a half-cell—meiosis—when the male sperm and female ovum fuse to form a single cell carrying hereditary material from both parents. That first cell then starts dividing equally—mitosis. For cloning, we use the process called anucleation. We remove the nucleus from a single cell and replace it with the nucleus of a sex-cell from the same donor, making sure it is of the donor’s sex. The fertilized cell is then induced to replicate itself—as in the womb. All the hereditary material comes from the original donor of the cell.

We induce replication by putting the cell in a culture media made from twenty different amino acids—these make the necessary proteins

for the cell to develop and divide. Proteins form the structure of the body and they also make enzymes, which control the body's chemical reactions. Once the original cell has started to divide in the culture, it is merely a case of providing an artificial womb environment. Although we have special sex cells, the fact is that *all* our cells contain the twenty-three pairs of chromosomes that make us the individuals we are. So we can produce an identical twin to the person we took the original cell from—only, with Project Arcadia, there is one very important difference—which you should find fascinating, Bruce.”

“You were specifically forbidden to experiment with cloning, Jany. God knows, I detest the WFC bureaucracy, but I agreed with them on that.”

“Galileo was also forbidden to challenge the ruling assumptions of his time. Keep showing the sequence, Mary.”

At the next slide, Bruce drew in a sharp breath. Khomich frowned, glancing uneasily at Bruce.

“That’s right,” said Jany, a slight note of triumph coming into his voice. “Beginning to look like a foetus now. Of course, we have cheated—by now we are adding a variety of growth hormones—this sequence is from one of our earliest attempts. As we became more sophisticated, we hurried the process along by adding cells from different parts of the body. Look—see the heart beginning to beat?”

“You mean you have actually replicated a living human embryo?”

“*That* is simple. Even before I was disciplined, people were making tissue cultures and incubating cell colonies.” Jany laughed. “They thought that transferring me to plant biology would keep me out of mischief! Now—here is Stage Two. We are now using ordinary photography—notice that our little man is wearing an oxygen mask. In normal terms he has been born—and I want you to note that these photographs are still from the same sequence, still from that first single cell...”

They were looking at a perfectly normal, naked, well-proportioned adult male!

The lights went on. Jany thanked the girl. She put the boxes of slides into a cabinet and left the projection room. Jany smiled at their suspicious faces. “Yes—the sequence was shown in correct order and everything came from one cell.”

“That was a fully-developed man! Even if you could do it, a sequence like that would have taken eighteen years at least—

“So how could I have shown you slides of such an advanced cloning

technique from eighteen years ago?” Jany stood up, his face glowing with triumph. “Bruce—those slides were all taken between September and November of last year. From single cell to fully-developed adult male in forty-three days! And believe me—we have become a lot more sophisticated since last year!”

Khomich looked impatiently from Bruce to Jany and then at Bruce again. Bruce stared at the Frenchman, who seemed delighted at his bewilderment.

“And that is not even half of it, Bruce,” he said enthusiastically. “Do you realize that the final sequence of photographs were all life-size?”

“Life-size? But they were—

“Exactly! Why do you think we had to work in total secrecy? That fully-developed male you saw—his name is Carrere, a radio-operator. He is out in the garden at this moment.”

“It’s the wrong time for jokes, Jany.”

“Bruce—did you ever hear about my mini-wheat fiasco in New Mexico? We were using polyploidy and growth hormones to produce a bigger wheat—but what did I do? Quite accidentally I grew ears of wheat about twenty times *smaller* than normal. Instead of a Growth Stimulating Factor, I’d come up with a Growth Inhibiting Factor. Naturally, it was not considered a great triumph to produce micro-wheat with a world food shortage but—” he smiled modestly “—well, I’m well-known as a maverick, although I prefer to regard it as devotion to pure science. I isolated the hormones which produced the Growth Inhibiting Factor, then I evolved the chemical formula for synthesizing the GIF. The miniaturizer you might call it. That was when I got in touch with George Richards—he has always been on the side of pure Science against the dictates of bureaucracy. It worked with individual organs—we could produce a functional human liver to any size we wished. We tried it on fish and mice—and then pigs—on a trial and error basis, of course. We had our fair share of monsters at the start—but even I was surprised by what we could produce—micro-fish—complete in every detail! Then mice and pigs. And finally—human beings!”

“Are you serious, Jany?”

“Of course! Why else did we have to steal the equipment? Genetical engineering is the single most emotive issue of recent history—but imagine the outcry if we combined identical-twin cloning with miniaturization! We had to go on with it, of course, we had no choice—it is going to be the salvation of the human race!”

“What is?” Khomich demanded. “Making us all dead bodies in

freezing cabinets?”

Jany was amused by Khomich’s stupidity. “You understand what I have been trying to explain, Professor. Believe me, it works. Once we have a single cell, we can clone identical twin replicas of any person alive on earth. A hybrid computer with an optical monitoring capability is programmed to control the replication—we can’t simply produce a perfectly proportioned micro-man because volume and weight increase or decrease at a ratio of eight times to each doubling or halving of the size. Adjustments have to be made or the muscles would be so strong you would rip your arm off if you lifted something heavy. The smaller organism also needs a much higher metabolism rate to make up for the extra heat loss caused by the proportionally large increase in the body’s surface area. So the computer stimulates cell division with one set of hormones and controls the size to which the organs and muscles and bones grow with the GIF hormones.”

Khomich looked at Bruce. “Is he telling us that they have produced—small people?”

Jany threw up his arms in triumphant excitement. “You’ve got it! People thirty-five times smaller than life-size! Micro-people—some of our lab technicians have nicknamed them *micronauts*! That is what Project Arcadia is all about—that is why your soldiers cannot go into the garden. There are six people out there somewhere—micro-people! Before you saw them, you might have crushed them to death under your boots!”

Chapter 9

The Commissioner came on vision. He held up a thin sheaf of paper. "I've been through the report you sent on the coder-wire, Bob. Any news of Richards yet?"

"No, but his wife has turned up at what they call base station. Khomich is talking to her now."

"Pretty amazing stuff, eh?"

"Some might call it the most incredible scientific achievement of all time."

"Who is backing them?"

"Jany says they did it on their own—I think he's telling the truth as far as he knows."

"No, there has to be a political angle. When can they get Richards out of there?"

"That's the problem. They think he's in a Life Support capsule, but it's too far into the heart of the garden for the crane-arm to reach. Khomich wants to crash straight in and take a chance on not trampling Richards underfoot."

"You think that would be a serious risk?"

It's pretty overgrown out there—and I can't see Khomich and his baboons tiptoeing through the tulips like gossamer fairies. There's another factor—Jany says they stopped allowing the micro-people to be in direct contact with full-size people because of the severe psychological shock. Can you imagine the effect of Khomich towering a hundred feet over you?"

"So what does Jany propose to do?"

"If they get a fix on the capsule's radio-pulse, their mechanics might be able to fix up an extended arm—but normally they would just send out another rescue party from their base station. They have a dozen or so people down there on a more or less permanent basis. They're the ones who were notified as having died."

"How long would it take them to rig up a longer arm?"

"Hard to say—they'd have to send for more equipment."

"So their own rescue party looks like the best bet?"

"I think so."

Khomich came into the video-link room. He looked apprehensively at Towne's face on the screen.

"I have been speaking to Mrs. Richards on their video-relay, Commissioner," he said hesitantly. "She says she had a row with her husband and left the party with another man.

You don't believe her?"

I spoke to her on a video-screen, Commissioner. I have no way of confirming that her story is true. She looked normal-size—the whole thing could be a trick."

"It's true—we haven't actually seen any of these micro-people," Bruce said. "On the other hand, we have seen Richards's dormant body in the Cryogenic Room."

"Do they claim to be able to bring them back to normal size?"

"Jany says so. It's expensive—the small body is redundant once they've drawn off its electroencephalic wave patterns and fed the thought processes back into the full-size brain—but if miniaturization is possible, I guess the reversal would be even easier, simply a case of giving the big body back its thoughts and reactivating it. Obviously, Richards wouldn't have taken any irreversible step that would prevent him coming back to astound the world."

"That's true. All right, it looks like the rescue party."

Bruce nodded. "I take it you'll want me to hang around until they bring Richards out?"

"Is he likely to be alive?"

"If he's made it to one of these capsules, he should be okay—they're a miniaturization of a Stellar Probe life-support system. They've got food and an oxygenator and a water-recycling unit. Jany says they're impregnable even if swallowed by a bird. Believe me, Towne, it may be madness, but they've taken it all the way!"

"It sounds like it. Trouble is—if they get to Richards first and he knows you're there waiting to arrest him, we might never see him again." Towne thought for a moment, then made his decision. "You say Jany claims this process could be done in thirty-six hours?"

"I suppose if you believe one part of it, you have to take everything as fact."

"Right. I want you two to join this rescue party—take some of the soldiers if that doesn't hold up the process. You should get to Richards by—"

"Just a minute!" Bruce's expression was part frown, part smile. "You want us to go down there? As micropeople?"

"We must get to Richards and we can't do it any other way without risking his life. Do you have any objections, Staff-Commander?"

Khomich shook his square, cropped head, his face impassive. "If that is your order, sir."

Bruce turned on him scornfully. "You're no genius, Khomich, but I didn't think you were unhinged." He stood up. "You can count me out, Towne."

He walked out of the video-room.

He was still smiling grimly at the lunacy of what Towne had suggested when he came back to the big, split-level Control room. Jany was looking at the model garden. "Any contact?"

Jany shook his head. "If we hear nothing in the next six hours, we will send out a rescue party at first light tomorrow.

"Wait till you hear this—Towne has just ordered Khomich and myself to join that rescue party!"

"Oh? You would be willing to undergo the cloning-down?"

"Would I hell! But Khomich—well, Towne seems to own him, body and soul. If there is a soul."

"Is the Commissioner impressed by the project?"

"You know what bureaucrats are like—all science is mumbo-jumbo to them unless they can see the profit angle. I think he's more worried about how you people managed to filch all that stuff from official stocks."

"You don't like Towne—yet you are working for him? Why is that, Professor?"

"I made the mistake of helping a woman and her child. He's quite prepared to send me up north to a construction camp if I don't help him—seemingly, he's reached an advanced stage of paranoia where he doesn't trust anybody at Geneva."

"You're right, of course, the garden has its perils."

"I've worked with insects all my life, Jany, you don't have to tell me what perils a micro-man would face down there."

"The insects? Yes, they can be tiresome. There are more serious complications—for one thing, we know that coming back to normal size is physically easy, but we need long-term research to discover any psychological effects. That is why we staffed base station with people willing to stay down there on a more or less permanent basis."

"True believers? Disciples of George Richards, the new Messiah?"

"You may sneer, but it is true, we are *all* true believers here—that is why we gave up our careers. We accept all the dangers because we

believe this is the only way ahead for the human race.”

“In a nice, safe garden with a wall round it?”

Jany raised his eyebrows. “A lot of botanical and entomological research was done here in the past—the garden is possibly not as cosy as it looks. We sealed it off at the bottom end ourselves—there’s a colony of leafcutter ants beyond the wall, they seem to be thriving in France’s new climate—but we’re not sure how many varieties of unusual creatures are still inside the walls. If you wish, I’ll show you some of the other work we’re doing here—you would be interested in what we call our Tropical House.”

“Where is that?”

“On the other side of the building—you may have seen the greenhouses? From the previous occupiers we even inherited a small colony of driver ants which our entomologists find a most rewarding study—but don’t worry, they are safely behind glass.”

“I’m not worried, I’m going nowhere near your garden, believe me. I’m only surprised George Richards risked it himself—”

“Yes, there are risks, but George said our pioneer work had to cover as many environmental conditions as possible. When it comes to the Supreme Council, he does not wish them to think Arcadia is exclusively for inhabitants of the Northern Hemisphere. Arcadia is for the whole of humanity—”

“Save it for your trial, Jany.”

“What trial?”

“You think nine million marks will be written off as an administrative misdemeanor? You were playing for big stakes and now you’ve been rumbled.”

Jany looked appealingly at the ceiling. He sounded hurt. “This has nothing to do with politics or power, Bruce. The human race is starving to death. Those WFC bureaucrats would be out of work and rations tomorrow if they can’t go on fooling the world that things are getting better. The truth is, they’re getting worse. And the food resources we have are being wasted keeping millions of unproductive people alive. Down there is food on an unlimited scale.”

“You saw yourselves cloning-down millions of us, did you?”

“How much are we spending on the Stellar Probe project? Trillions! Why? Ignore all the propaganda about outer space supplying new sources of energy—the real goal is to find a commensurate planet that will support human life when this one finally dries up. If they find it, what happens? The men in power will grab seats on the first rocket for

themselves and their families and disappear into the sky before the rest of us know what has happened. Isn't that even more of an elitist concept? We can't hope to clone-replicate millions of people—but we can promise unlimited abundance for those who do cross over. In time they would multiply beyond mathematical reckoning. How do you think the ants live in colonies of millions? Anything they eat we can eat—we can even eat the ants themselves! That's only one example—we eat lobsters as a delicacy, but they are sea-bed scavengers, dirty feeders—the grasshopper is a clean eater and just as nutritious. What difference is there between eels from the sea and worms from the soil?"

"I know all that stuff, Jany, I'm working on the insect breeding programs. But we could never make a transition like that and survive on any permanent basis."

"There's an old copy in the library of Arthur C. Clarke's book, *Profiles of the Future*. Do you know one of Clarke's laws—"Any sufficiently advanced technology is indistinguishable from magic." Look out of those windows, Bruce. Look how green it is. Paradise. That's where the future of mankind is and that is why George is out there at this moment—not merely testing his own bravery or ingenuity. He wants to master all the dangers of that environment so that when he makes his report to the world he can say, "I have been in the future and I have survived. Would America have been discovered if Columbus had waited for radar?"

"The same old scientist's dichotomy—laboratory brilliance and political naivete. I know Richards—he wants a sensational scientific triumph. When he gets it, you people will be left to rot."

The big doors opened. Khomich stood there for a moment, his face at its most impregnable. Behind him stood his young aide, the boyish Captain Robinson. He looked like a man swallowing hard to keep his stomach down.

Khomich addressed them in the tone of a public pronouncement. "Doctor Jany, the Commissioner wants me to lead a rescue party into your garden to find Professor Richards. I will take Captain Robinson and one soldier, Corporal Carr—and Professor Bruce, Major Wollaston will be in charge here, with orders to allow no outside communications from this establishment unless directly to the Commissioner. Now—where do we go to start the necessary procedures?"

"You can go to hell," Bruce said firmly, "I'm going home. If Towne puts me on some fake trial for foodbribery, I'll make such a stink he'll wish—"

"I would like a word with you, Professor," said Khomich. Bruce

followed him to a quiet corner of the big studio room. Khomich kept his eyes on the others. "You remember Larson?" he said quietly.

"I won't forget that young creep in a hurry."

"The Commissioner has just told me—Larson disobeyed instructions, he tried to communicate with the SRP office to warn Richards."

"I hope the young rat gets posted to Sakhalin Island."

"He will be going nowhere—except as fertilizer. He was arrested. In trying to escape from Security HQ at Tripoli, he fell from a fifth floor window."

"Escape—from a fifth floor window? Thrown you mean!"

Komich shrugged indifferently. "The choice is yours, Professor. The Commissioner wants you in the rescue party because you are an expert in bugs and such matters and also because Richards is more likely to react favorably if you are there to question him. You cannot be forced to go through this so-called cloning process—but I would not count on your chances of even reaching a trial if you refuse."

"He had Larson chucked out of a window for my benefit! The cold-blooded old bastard—"

"You are coming with us?"

Bruce let his chin collapse on his chest.

"We are ready," Khomich said to Jany. The little Frenchman rubbed his hands together. "Wonderful—we wish to let the whole world see the potential of Arcadia. Let us go to the clinic. We'll speed up the process. By taking cells from different parts of the body, we'll accelerate the divisions in ectoderm, that's the outer layer of skin, hair, eyes, all nervous tissue—the mesoderm, your muscles, bones, blood vessels—and endoderm, stomach, intestines, liver, and so forth. We'll intensify the hormonal ratios..."

Chapter 10

When he awoke, he was looking into a woman's brown eyes. He had been in a long dream. Its events were already fading. He could remember nothing from before the dream. The woman seemed tired and worried, yet she was smiling.

"You mustn't move until I tell you," she said. She had fair hair. He had the impression she knew more about him than he did.

"Who are you?" he heard a voice saying. It was his own voice, yet he could not remember hearing it before.

"I'm Anne Richards—George Richards's wife—keep perfectly still." She leaned over him, hands touching his head. She smelled of something he liked, but could not name. She was wearing a white lab smock.

"There you are, she said, showing him a clutch of clamps and wires. "You can get up now. There's a can of ointment on the bench, it's a DMP-based insect-repellent. Spray yourself all over, even the soles of your feet. I'll go and see how your friends are making out."

Not until he swung his legs off the narrow couch did he realize he was stark naked. He grabbed at the combination underwear folded on the bench. "Don't forget to spray yourself—and don't blush, Professor, I'm a doctor." She left him.

He sprayed himself methodically, starting with the soles of his feet and even squirting the fine mist onto his hair. Why, he could not clearly remember, only that it was an instruction. He then pulled on the silk-lined combination undersuit. Immediately, his skin felt clammy. He was in a cubicle bare of furnishings except for the couch and bench and a mobile console-unit on which were coiled the wires she had removed from his head. He blinked, his head and eyes fuzzy. Why were there wires on my head? he wondered. One wall of the cubicle was made of glass. He walked across to it in his bare feet.

Only a few inches away was an alarm clock towering above him. He could not focus on anything beyond the clock. "I've been drugged," he said angrily.

Feeling shaky, he sat down on the couch, blinking continuously. A young man with short red hair and white teeth smiled at him from the doorway.

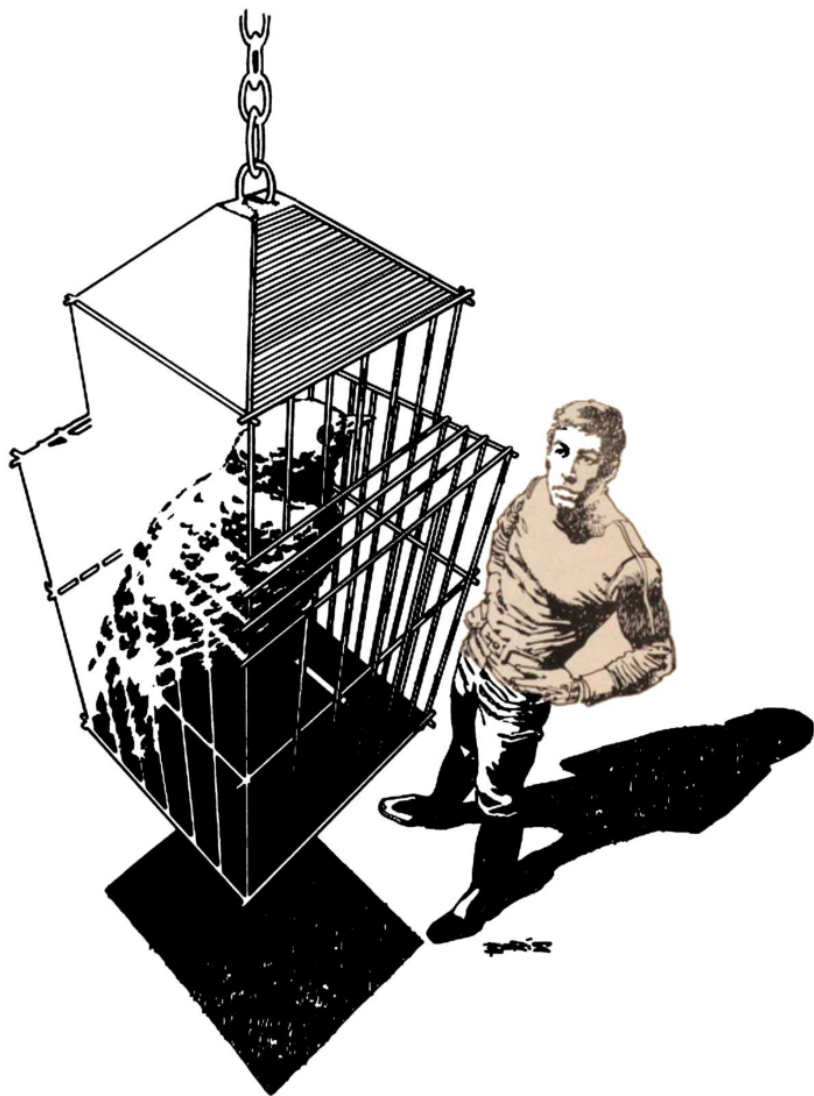
“Hi, I’m Stanley Magruder,” he said enthusiastically, coming into the cubicle with his hand out. “It’s a very great honor to meet you, Professor Bruce.”

Bruce was taken aback by the energetic and instant friendliness of the young man. “Is it?”

“Naturally, I’m familiar with all your published work, Professor. I’m really looking forward to being with you in the garden. I know you’ll teach me a lot, sir.”

“Oh? What do you see through the glass over there?”

Magruder went across to the glass wall. His walk was springy and muscular and his laugh about the same. “Doctor Jany always does something like that. When I crossed over, he left a canary in a cage. It was as big as an eagle.”



**"When I crossed over, he left a canary in
a cage. It was as big as an eagle."**

"It's drugs, is it?"

"Look in the mirror, sir."

His eyes opened in astonishment. He felt tentatively at his chin and cheeks. A hand moved simultaneously in the mirror. It was his own face

—yet he had short black hair and no beard. His own face from thirty years ago!

“You’ll feel dreamy and absent-minded for a little while, sir,” Magruder said sympathetically. “Your brain normally has around fourteen billion cells, but now you’re having to cope on about a billion. The reallocation and regrouping of functions doesn’t take long, however. George always tells people that the old scientist Louis Pasteur did some of his best work after half of his brain was damaged by a cerebral hemorrhage.”

He touched his hair. “What were those wires?”

“The electroencephalogram input circuits for feeding the impulse patterns of your full-size brain into your new brain—mentally. you’re now the same person you were before—”

“The replication—it worked! That clock isn’t big—I’m *small*. And you’re small! And that woman—”

“Anne Richards? Yes, sir. She’s small as well.”

“Golly. It doesn’t feel very different. Except that I’m baking hot.”

“That’s the silk-lined underwear, sir. At this size, our surface areas are proportionally much greater and that increases the rate of heat loss. We’re testing a new type of field-dress—with solar-heated panels. You’ll get one down at base station.”

Bruce picked up a pair of heavy white socks. “Are these actually—small?”

“Yes, sir. Thirty-five times smaller than normal. All our clothing is made on old jigs from a London toy factory. Did you spray yourself, sir?”

“Yes—the woman told me to do it.”

“The butyric acid in our sweat attracts other creatures—seemingly we leave billions of molecules of the stuff every time we put a foot down.” Bruce stared at him. A steady smile was, it seemed—the only expression his clean-cut features knew.

“*Golly*?” Bruce said doubtfully. “I haven’t used that word since I was twelve.”

Magruder laughed with delight. “It’s that old fantasy, sir—if only we could start over again, but knowing what we know now? In a funny way, that’s what happens.” He hesitated, though his smile did not waver. “Sir—there is something...”

“Yes?”

“We use given names down here, sir—we all like to think of ourselves as a sort of family. Would you object to that, sir?”

"I guess not."

"Sir—I don't know your given name—on your published work you always used your initials."

"It's Bob."

"You sure you wouldn't mind me calling you Bob?"

"I'll let you know."

This puzzled Magruder, but he smiled and nodded anyway. "Shall we go then—Bob?"

Full reality came flooding back when they found Khomich in the corridor with Captain Robinson and the SD corporal, Carr, a black Londoner, all wearing identical undersuits and socks. Robinson looked slightly embarrassed, but Khomich and Carr had the narcissistic arrogance of bully-boy athletes, Khomich squat and heavily-muscled, Carr narrow-hipped and broad-shouldered.

Magruder held out his hand. "My name is Stanley Magruder—you must be Staff-Commander Khomich. It's a very great honor to meet you, sir.

Anne Richards appeared in the corridor. "We'll take the elevator down, shall we?" she said.

"Don't we see Jany?" asked Bruce.

"No, Bob," Magruder replied. "We find it's best that Crossovers are not put in a same-room situation with normal-size people. You can speak to him on the closed-circuit link from down below." As they stepped into the lift, he smiled at Khomich. "We have a sort of custom down here of calling each other by our given names, Staff-Commander. Makes us feel more of a team."

"SO?"

The lift door closed. Magruder smiled at them all in turn.

"I'm Stanley—I prefer that to Stan."

"I agree with you," Khomich said.

Magruder laughed heartily. Carr exchanged a grimace with Robinson. "I don't know *your* given name, Staff-Commander."

Khomich's face was totally blank. The tall young American fidgeted uneasily. At last Khomich spoke. "If you need to call me anything, Staff-Commander will do."

"Well, sir, we'll be out there in the garden for a couple of days at least and—"

Khomich simply stared at him. For a moment, Bruce thought he saw

something ugly on the American's face, but the ready smile was soon back in place. The lift stopped and the door slid open. An elderly man wearing a blue nylon tracksuit stepped forward to shake hands.

"Professor Bruce—this is indeed an honor. I'm Gerhardt Muller, base station leader. Welcome to Arcadia. And this is Staff-Commander Khomich? Welcome—please call me Gerhardt. We've dispensed with formality down here, we like to—"

"Where are the clothes?" Khomich snapped. Muller slapped his forehead in self-reproach. "And here I am, chattering away—come with me if you would, of course I can't promise you Brooks Brothers tailoring.

The field-duty coats and trousers were of the usual denim—but that was their only familiar feature. They were silk-lined and covered with wide black and yellow stripes, except about the shoulders and upper arms, which were covered with white panels. "No matter the angle, the sun is always hitting one or more of these solar-absorption panels," Muller explained. "The heat is then air-conducted throughout the suit by means of a capillary network. Darkness is still something of a problem."

"We'll be pretty inconspicuous—as long as we're in a wasps' nest," Carr complained.

Muller laughed. Magruder laughed. Carr frowned. Khomich turned on them slowly. "Corporal Carr said something funny? Are you running a joke-show down here with these circus clothes?"

"Forgive me," Muller oozed. "Yellow and black are common warning colors in nature. We tried camouflage suits at first, but they were not effective. You'll be conspicuous, yes, but that's exactly why nature gave creatures like the wasp its bright colors—to let predators know in advance that this is a dangerous animal, so keep clear."

"You mean they'll think we're wasps?" Bruce drawled.

"Something like that, Bob," said Magruder warmly. His relentless, breezy good humor was already grating on Bruce's nerves.

They pulled on the yellow and black suits and then found boots to fit themselves. Muller and Magruder watched them with smiles that were almost maternal.

"Now we wish to see what weapons you have," Khomich said, stamping his new boots.

As they followed Muller along different corridors, they saw people working in laboratories and workshops. Muller seemed to be giving them a guided tour, stopping at the door of a metal workshop to introduce them to two women drilling holes in a sheet of titanium. Wiping the lubricating oil off their hands the two women greeted them

in what seemed to be the regulation manner—an energetic good humor of a kind Bruce had not experienced since the old days of international conferences. It had always irritated him, but now, particularly when he looked at Magruder, it seemed to indicate something more than the merely bogus—an inner arrogance, even the suggestion of a threat; when a man kept shaking hands and smiling was he not, in fact, showing you his fist and his teeth?

Muller wanted to show them the canteen and kitchens. “We know how food is cooked,” Khomich said. “Where is the armory?”

Muller laughed apologetically.

The pistols were long-barreled and heavy, made of a dull alloy, the barrels perforated.

“We have two kinds of ammunition,” Magruder explained. “The bullets in these black clips have steel tips, but the rest is made of a very tough nylon. You could call them armor-piercing. The steel tip will penetrate the chitinous exoskeleton of big beetles and such, then the nylon whangs around inside and rips everything to mush.”

“George is very strict about only using guns as a last resort,” Muller said, “we have things called prods—like metal walking-sticks only they work on cell-batteries and can give most things a salutary shock. We regard it as very important not to disturb the ecological balance of the garden. After all, we’re here to create a new world and we don’t want to import all the mistaken attitudes of the old one.”

“Just what kind of nasties are we going to bump into out there?” Carr asked.

Magruder smiled. “Some of our insect cousins are on the impetuous side—but, after all, we’re the real killers of this world. These red clips hold mercury bullets—they penetrate in the usual way, but then they explode into thousands of mercury particles which blast a pretty big exit hole. Very useful for creatures with a dispersed nervous system and a soft exterior.”

“Wouldn’t flame-throwers be useful?” Robinson asked.

Muller was shocked—in a jolly sort of way. “We’re lighting the flame of progress—not starting forest fires!”

Bruce examined a pistol. “Surely the Professor won’t be shooting at his friends the bugs?” Khomich smiled sarcastically. Bruce tucked the pistol into his waistband. “It’s not insects I’m afraid of.”

Muller led them along another corridor. “This is what we call the Departure Lounge,” he announced, leading them into a glass-domed hall the size of an aircraft hangar. A trail of cables led across a bare concrete

floor to a recess where they saw radio equipment and a video-screen. As they walked out into the middle of the floor, their eyes were dazzled by a blaze of sunshine.

"There's Lena checking your packs," Muller said. He pointed to the domed glass roof. "In time, we'll be using every inch of this space."

"What for?" Robinson asked.

"All the equipment and stores and back-up facilities we'll need when the project really gets under way, of course. My dear fellow, this is only the start."

"None of you people seem particularly worried about George Richards," Bruce said to Magruder.

"George is pretty tough," Muller retorted sharply. Bruce wondered if he had touched a sore spot.

"Lena—meet our visitors," Muller called.

The girl was kneeling beside a row of red canvas shoulder-packs. Before she stood up, she looked over her shoulder. In that brief moment, there was no smile on her face. She had shortly-cut dark hair and gray-blue eyes. Her mouth was wide and narrow-lipped. Then she jumped up and brushed back her short dark hair and greeted them like old comrades.

"Lena is a nutritionist and she's also your expert on soil chemistry," Muller explained. "We all double up in skills here."

Imagining he had Khomich's mental processes pretty well typed, Bruce waited for his objection to the inclusion of a second woman in the party. Instead Khomich let the girl shake his hand and then said, without hostility. "You think you can keep up with us?"

She winked with an almost masculine heartiness. "You try me," she said in an Australian accent. When Muller introduced her to Bruce, she said, "I read all your published work when I was a student, Professor. I couldn't believe my luck when Gerhardt said you'd be in the party." She smiled guiltily. "We use first names down here, but it seems presumptuous with a distinguished person like you."

"Okay, you can call me 'Professor.'"

She took it, of course, as a joke. Bruce watched her dispassionately. Like Magruder, she seemed strengthened by some unshakable inner knowledge which put her beyond sarcasm or insult. He remembered meeting people like that in the old days, when fear of famine produced a wave of new religious movements, each more fundamental than the last and each giving its adherents a cast-iron belief that they alone had seen the light.

“Right then,” said Muller, “Jany may have told you a few things about the garden, but down here we probably take a more realistic view of it. Most of the dangers come from our own ignorance. Each trip is part of our education and we’re always learning something new. All the gear is distributed about these packs—you ll each have a map, your own rations, a lapel communicator, water-bottle. Stanley and Lena will show you how to refill it from dewdrops—this is your prod—when you squeeze the grip, the gas-cell battery gives a slight electric shock to whatever the business end is touching—very useful for steering most creatures in the other direction. You’ll wear this gauze mask crossing the first stretch of lawn, at this time there’s a lot of dust, although the worst of the pollen is over. You must eat one of these brown cake-concentrates at regular intervals; that’s vital to help your metabolism keep up with the extra heat loss. You’ll find supplies of freeze-dried rations and cooking equipment at the safety stations. This is your torch—only use it when you’ve put up your tent and you’re safely inside. Light at night isn’t recommended.”

“Do we have compasses?” Robinson asked.

“They would be so small the magnetic force of the stones would make then unreliable. Your map will give you landmarks to guide you in most parts of the garden. Let’s take a look at the map.” They moved in around him. “Basically, this is an ordinary walled garden, but without being alarmist, I have to admit we’re not a hundred percent sure what might have been introduced accidentally or otherwise by all the people who’ve used this place for research. Apart from the raven or crow which attacked the last party, a pair of blackbirds have made the garden their territory—they might just have a peck at you. If you feel chilly, don’t try to emulate the lizards by basking on hot stones to raise your body temperature—after a hot spell like this, the stones have absorbed a great deal of heat. If you don’t reach Station Two here on top of the main rockery before dark, be careful where you pitch your tent—put it up under shelter, but not in the middle of heavy foliage because plants give off a lot of carbon dioxide at night. When you come down the other side of the main rockery, you’ll be in the general area of Crossing Two over the little stream—it’s just a piece of wood, actually. George was in that area when he radioed for help. Look out for nettles—a few stings could be fatal at our size. Normally, you would have done a few short acclimitization trips before a journey like this, but no matter, the garden is not a deadly dangerous place—we have electrified stripping all around the wall to keep out such predatory mammals as foxes and wild

cats.” He smiled. “Just think of all the old explorers and missionaries who penetrated the unknown heart of darkest Africa with nothing much more than faith and flywhisks.” A small tube clipped to the chest of his nylon tracksuit began to emit a bleep. “Control wants to speak to me,” he said, hurrying across the wide concrete floor to the communications recess. Khomich followed him.

“What’s it really like out there?” Corporal Carr asked Lena Davidson. Anne Richards shuddered.

“It’s horrible.”

“Honestly, Anne, I don’t think you should be coming on another trip so quickly,” said the Australian girl. “We know roughly where George must be, we don’t need you to—”

Anne Richards shook her head emphatically. “No! I couldn’t stay here worrying.”

Stanley Magruder put his arm round her shoulder. “Don’t worry about a thing, Anne. We’ll find George. In fact, I’ll bet he’s in one of the uncompleted Safety Stations right now, waiting for us.”

Bruce noticed that she did not enjoy Magruder’s brotherly attentions. She pulled away, looking across to where Khomich was standing behind Muller at the video-monitor. “What exactly is *that* man here for?” she asked Bruce.

“The same reason I’m here—to find your husband.”

“That isn’t why you came here originally.”

“Towne wanted to know what Project Arcadia is all about. After all, your husband diverted a lot of WFC material to this place without going through channels.”

“There was no need for you and these soldiers to come down here.”

“Why not? Don’t you want our help?”

“You walked out of WFC because Towne made George chief-coordinator. You don’t even like George, do you?”

“Does that matter?”

“Are you going to arrest him?”

“He has some explaining to do, that’s all.”

She stared up at him, her brown eyes trying to decide if he was being honest.

Muller and Khomich came back across the concrete floor. “It was Jany with a weather report,” Muller said. “It’s just possible we’ll have rain here by early morning. Normally, we don’t let parties go out if rain is imminent.”

“We are not old women frightened of getting wet,” Khomich said

sneeringly.

“Of course not. Anyway, you’re in good hands with Stanley and Lena.” He smiled at them all in turn. “Well, this is it. Don’t worry, Anne, you’ll find George safe and well. Good luck, everybody.”

They each shook hands with him and followed Magruder to the dimly-lit entrance of a low corridor, facing a fine spray of OMP insect-repellent. The last thing they saw, above the entrance to the exit corridor, was a brightly-colored notice of the kind laboratory technicians always find so funny:

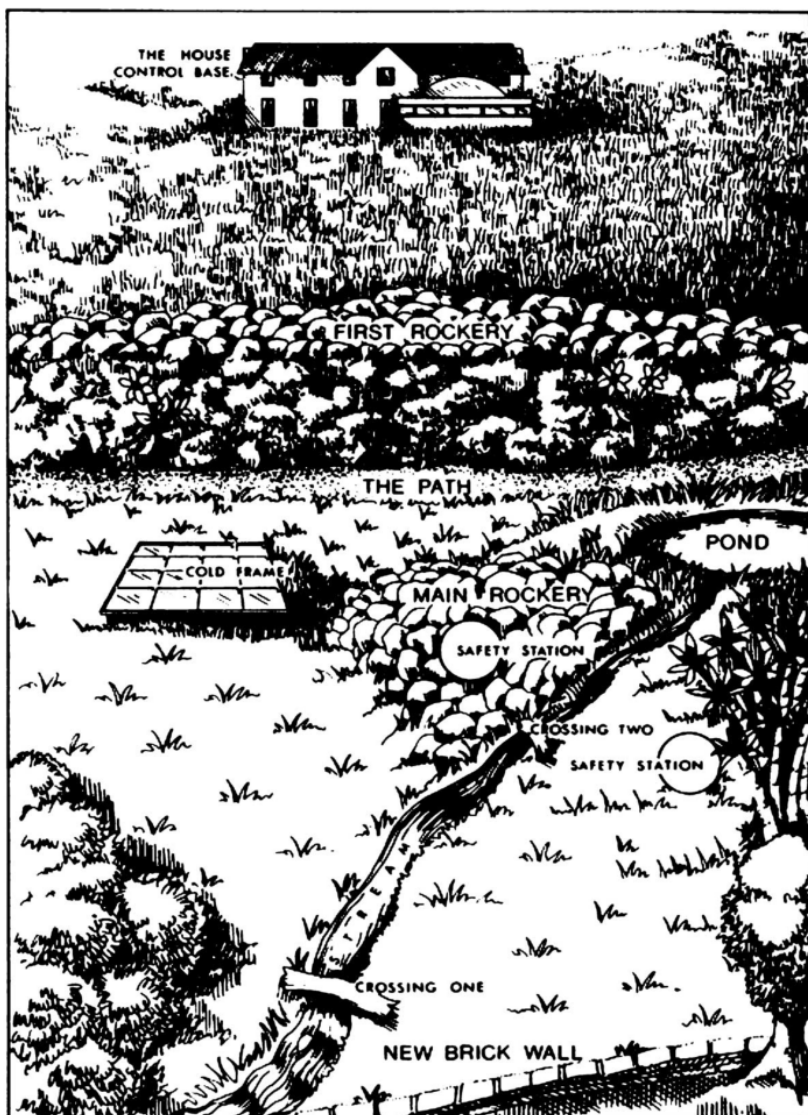
DON'T LET THE GRASS STEP ON YOU!

Arcadia

The Rescue Party

ROBERT WILSON BRUCE	Doctor of Biology (Cambridge); born Regina, Saskatchewan.
ANDREI ILYANOVICH KHOMICH	Staff-Commander, WFC Department of Security; born Vinnitsa, Ukraine.
ANNE RICHARDS (Nee Gaskeyns)	Doctor of Medicine (Paris); born Liege, Belgium.
STANLEY NORRIS MAGRUDER	Graduate (Honors) of the WFC Institute of Technology (Atlanta); born Sacramento, California.
LENA ELIZABETH DAVIDSON	Graduate (Honors) of the WFC Institute of Technology (Atlanta); Doctor of Organic Chemistry (Sydney); born Narooma, New South Wales.
HUGH TELFER ROBINSON	Captain, Army of the UK Zonal Council; born Didcot, Berkshire.
FITZROY WAVERLEY CARR	Corporal, Army of the UK Zonal Council; born Brixton, London.

Map of the Garden



Chapter 11

Was this the planet Earth?

Coming toward them between the towering grass saplings was what looked like a giant panda—with a hard, glinting face. Its lustrous hairs were long and jet-black except on its back, where they formed a brilliant yellow streak. It ambled past on small, rubbery feet, as long as a railway coach, a rippling column of undulating black and yellow fur.

Lena Davidson's eyes smiled at Hugh Robinson above her white gauze mask. "That's a woolly bear caterpillar of the garden tiger moth," said her muffled voice. "Quite harmless." He nodded uncomprehendingly, baffled by this dream world of vast noise and stupefying smell, a world from half-remembered storybooks, a world seething with dazzling images both hideous and beautiful, a world so huge their puny eyes could make no sense of it.

When they could see the sky, it was no sky he knew, so richly blue it became a purple ocean floating on top of the tall spears of grass through which they moved in awe at their own insignificance—so small they could not see the sun.

And the smells.

The smell of young grassblades broken down by their boots, more sweet than a thousand fields of mown hay. The bittersweet smell of soil, as pungent as the tang of oceans, the stench of organic matter decomposing under the attentions of unseen armies of bacteria.

Something leaped up from a small patch of black soil among the broad plantain leaves, springing far above his head. For a moment, he had a glimpse of what looked like a small lobster. Nobody else seemed to have seen it and he decided to say nothing, in case they thought he was feverish. Hugh Robinson had been in the army for twelve years, four of those in the Special Duty branch. He had served in cities, in deserts, and in mountains. He had seen most of the ways it was possible for human beings to die. Like all professional soldiers, he had learned to maintain his sanity at the expense of his imagination. Until the moment when they stepped out of the base station tunnel into the huge jungle of grass, he would have said, truthfully, that he had lost the capacity to be surprised by anything the world had to offer.

But this was a different world.

Grass was *hard*. The short blades had longwise ribbing as tough as ship's planking. The tall, seedbearing stems were silica-bright and polished smooth as stainless steel, the leaves so electrically lustrous they seemed to be under a vast green spotlight.

The ceaseless buzzing and humming grew louder, as if they were approaching a massive generator. At the head of the little file, the young American signaled for them to backtrack through another opening in the jungle of tall fescue grasses.

"White clover—attracts bees," he said through his gauze mask. Hugh Robinson found himself sweating, his clothes wet and sticky in the cloying humidity of a fetid underworld where no breeze penetrated. The detour led them to an even more dramatic sound, an immense clicking louder than any pneumatic drill. Professor Bruce stopped, pointing up a stalk of grass as thick and tall as a ship's mast. Robinson looked up and saw an olive-green body slung low between the girders of what looked like the frame for a garden swing.

"See how the grasshopper makes its noise?"

Robinson shook his head. Bruce made a sawing motion with his hands. Looking up again, Robinson saw a long, thin girder-leg dragging a sawtooth edge across a raised rib. Staff-Commander Khomich raised his pistol. Corporal Carr automatically followed his example.

Before they could fire, the young American hit the grass sapling a sharp rap with his stick.

The grasshopper's movements were so fast Robinson saw them only subliminally, a vague impression of girder-legs catapaulting the hard, green body off into the purplish ocean of the sky. Fine dust and hayseeds the size of small apples fell on their heads. The towering stalk twanged back and forth. Above his mask, the American gave Khomich a reproachful smile.

"We *like* grasshoppers," he said firmly.

Khomich's eyes narrowed. He started to say something—then the sky turned black.

The world might have been coming to an end, so violent was the rushing storm of noise and commotion, the grass saplings shaking with earthquake ferocity, seeds pelting down through a snowstream of white dust. They cringed in fear, not knowing which way to run from the monstrous creatures screaming and squabbling above their heads.

Corporal Carr fired one shot before Magruder the American grabbed hold of his arm. Robinson had a glimpse of great claws and scaly legs

and an expanse of creamy feathers. Carr pushed Magruder away, raising his pistol for another shot.

The little family of giant tree sparrows soared off into the unfathomable sky, their high-pitched screeches ringing in Robinson's ears.

They brushed themselves down and shook dust off their field hats. The young American put his arm around Corporal Carr's shoulders. "Let's save our fire for known enemies, huh?"

"We must test these weapons," Khomich said angrily.

Magruder nodded in agreement. "But let's wait for something worth testing them on," said his muffled voice.

Deep in the forest of towering grass, they came on a clearing in which grew a clump of champignons, mushrooms with light brown caps tinged pink and pale buff stalks with downy bases. The colors were so heightened and the familiar nursery-book shapes so large Robinson half-expected to see a little gingerbread cottage and hear the old witch fattening up Hansel and Gretel. Corporal Carr reached up and grabbed a handful of soft white fiber from the underside gills. A smell of fresh sawdust filled the air.

"Safe to eat, are they?"

"If they're cooked," said Lena Davidson.

Robinson saw the angry look on Khomich's face. He tapped Carr's shoulder. "For God's sake, Carr, stop playing around."

"Sorry, sir."

On the other side of the mushroom clearing, they passed a snail. Its shell was as big as a bubble-car, the dark brown shadings concentrically spiralled in the pattern of an embossed Roman shield. Its two uppermost antennae, like fingers with eyes, seemed to decide they were of no interest. With the beautiful spiral shell rolling like a howdah on the back of an elephant, the crocodile-skin body slid through the grass, leaving a silken trail of mucus which, when Robinson reached down to touch it, felt like damp rubber.

"How could you *touch* it?" Khomich's blue eyes looked horror-stricken. Robinson grimaced sheepishly, finding it impossible to rub the smear of rubbery mucus off his fingers.

"The garden snail used to be considered a great delicacy," said Magruder, apparently enjoying the revulsion this caused Khomich.

They came to a copse of horsetails—inconspicuous garden weeds that now looked like fir trees. Wherever he looked, Robinson saw familiar shapes—but of such gigantic proportions his eyes felt strained, as if from

looking too long through a powerful magnifying glass. They passed under copses of meadow buttercups, the yellow flowers flooding their hidden underworld with a golden light that glowed on their perspiring faces. Black spiders the size of mice scuttled up the leaves of grass. They came face to face with daisies, the crimson tips of the white petals so brightly contrasted they might have been newly-painted, the stalks so prickly they looked dangerous to touch, daisies as big as dinner plates.

Crossing a sheltered patch of damp earth, they were suddenly panicked by a frenzy of leaping creatures, Slate-gray, lobster-like, able to spring far above their heads. They shielded their faces from these jumping jacks—Carr pulled his pistol from his waistband, but could find nothing to aim at.

“Only springtails,” said Lena Davidson, “*Collembola*—they’re like the silverfish you find in houses. Don’t waste ammunition on them, Corporal—there’s said to be two hundred and fifty million of them to the acre.”

“Could be a rich source of food for us,” said Magruder, again smiling when he saw the look of revulsion on Khomich’s face.

As he became used to the sensual impact of a world where all smells and noises and colors were electrically amplified and heightened, Robinson began to feel tinges of guilt. How often had his feet blackened the sky of this magic underworld, the giant feet of a god who knew only how to devastate and crush and destroy? He looked at the others, searching their faces for some sign that they were as deeply affected as himself. Stanley Magruder and Lena Davidson had the happy look of expert hobbyists who at last had a captive audience to impress. Professor Bruce wasn’t the type of man to let any emotions show. He seemed to be thinking of something else. Khomich was in a hurry to keep moving through the grass, his eyes showing a tension Robinson found surprising; in the few days he had been serving as the staff-commander’s personal aide, he had come to believe that Khomich was the least nervy man he had ever known. Carr was another Surprise. Perhaps he had not realised the full implications of what he was volunteering for—if it could be called volunteering when Staff-Commander Khomich made you his first choice—but if he was nervous or frightened, he certainly wasn’t showing it. The very opposite. Robinson was immediately behind Mrs. Richards when the shiny red snake came pouring out of a gap in the yellowing layers of dead grass underfoot. She let out a scream, her eyes white with terror, falling back against him so heavily he lost his footing and felt his boots sinking down into the stinking black humus. Both Khomich and Carr had their pistols

out when Magruder pulled off his white mask; “It’s a millipede. It’s harmless, don’t shoot it!”

Khomich tried to push him away but Magruder forced down the perforated barrel of the automatic pistol. The millipede seemed as long as a railway train, an endless segmented body as thick as steel hawser, countless small legs gliding forward in synchronized waves. “Like watching a parade go by, isn’t it?” said Lena Davidson. Carr looked excited.

“Sure it’s harmless?”

“They’re vegetarians—it’s centipedes that are dangerous.”

Carr ran after it and prodded the shiny red body with his stick. Immediately came the first whiff of a smell so repulsive they had to turn away, holding their noses, covering their mouths, coughing, and spitting. As the millipede flowed off through the tangled undergrowth, Carr squatted down on his haunches, eyes closed, hand covering his mouth and nose.

“It isn’t fatal,” Magruder said cheerfully. “It’s a stink they blast off to repel other insects and predators.”

“Hydrocyanic acid,” Bruce said. “Somebody should tell the corporal this isn’t the pet department.”

“I’m sorry,” Mrs. Richards said to Robinson. “It gave me a fright coming up beneath us like that.”

“Me, too.”

She smiled weakly. “I’m sure I’ll never get to like this place.”

Lena Davidson was the only one to show Carr any sympathy. As he took a deep breath to clear his lungs, she gave him a pat on the back. “Better to treat everything as potentially nasty until proved otherwise.”

Carr rubbed his lips and tongue on the back of his hand. “If that was harmless, I don’t want to meet the real nasties.”

Lena Davidson knelt to tie up the lace of her field-boot. Robinson held back, scanning the solid walls of grass for predators. She straightened up and gave him a smile. “You finding all this interesting?”

“I keep thinking it’s some sort of lurid dream. You don’t seriously think people could live down here, do you?”

“Why not? You can see how much food there is.”

“Food? We can’t eat grass.”

“No, insects.”

“What a revolting idea!”

“That’s only your cultural conditioning. Entomophagy is common in other parts of the world.”

“Ento—what?”

“Entomophagy—the eating of insects. In Australia, the abos have done it for thousands of years. Ten witchetty grubs have enough protein for an adult—one would make a nice dinner for four of us. Don’t look so horrified—Eskimos eat maggots, Africans eat termites.”

“That’s their bad luck. We’d better keep up with the others.”

“This isn’t any more dangerous than the world the first cavemen found themselves in—and they faced sabertooth tigers without high-powered weapons.”

She stumbled and caught hold of his arm for support. She did not take her hand away. He kept a wary eye on the square figure of Khomich. “There’s something more frightening about bugs,” he said. “You can’t see what they’re thinking.”

“Well, if primitive man hadn’t been willing to take on much stronger and deadlier animals, we wouldn’t be here today, would we? Strangely enough, you army blokes may be exactly the sort of people we need.”

“You don’t like the army?”

“I don’t like Khomich.”

“He only carries out orders.”

“Hugh?” Her voice was very warm and friendly. Her eyes seemed to be saying that she trusted him. “George Richards is in trouble, isn’t he?”

“That’s why we’re here.”

“I mean in trouble with the top brass at Geneva. He’s a very great man, Hugh. Wait till you meet him and listen to him—he’ll inspire you the same way he’s inspired all of us.” Her hand tightened its grip on his arm, sending a tingle across his scalp. “Has Khomich got orders to arrest him, Hugh?”

His arm stiffened, forcing off her hand. He pulled up his white mask. “We’re falling behind,” he said briskly.

They passed under another grasshopper, frozen in the act of climbing a shiny stalk of grass. Bruce stared at its fishing-rod antennae and heart-shaped head; no longer did grasshoppers seem like mindless, genetically-programmed automatons, amusing jumping beans from that endless, sunny day of childhood. He was looking at a complex creature with individual purposes of its own, with a mouth that knew what it wanted to eat, and bird-like feet that consciously chose the right place to grip the tall stalk. A fellow living creature! He felt startled at this revelation of an equality of existence never guessed at through a microscope. These were not merely *specimens* from a seething myriad of insignificant insects, but fellow creatures of the earth, individuals each

of them as legitimate an heir to the miracle of life as himself.

Enthused by this thought, he tapped Khomich on the shoulder and pointed up at the grasshopper. "Amazing, isn't it?" Khomich looked up briefly and grimaced.

"No, look at it—that's a living miracle."

"Revolting."

"You'd like to shoot it, would you?"

"I will feel safer once I know these weapons work."

"I should imagine you'll get a chance to kill something before we get out of this garden, Khomich."

Khomich got his chance.

When they came on a thick bramble shoot partially hidden by decaying leaves and new shoots, Magruder said they had almost reached the other side of the old lawn. They followed the bramble's snaky route through the decomposing vegetation, carefully staying clear of the treacherous shark's fin thorns which could have impaled them as surely as a butcher's hook.

They came to a place where the carpet of grass rose up in a long, neat hillock.

Magruder prodded into the chest-high barrier. "Probably an old garden stake."

Carr climbed up onto the smooth hillock. "It seems all right."

Something moved in the darkness under the curtain of grass.

Magruder yelled, jumping back from the hidden log.

Out from the grass came a pair of huge red antlers.

They fell back, leaving Carr stranded. "What is it?" he yelled.

It came slowly out of the darkness, the long red antlers and then a dark-brown body that glinted in the diffused sunlight, an armor-plated monstrosity with shiny black legs and one jet eye behind each jutting antler.

When Carr saw the size of its body he pulled his pistol. "No," Bruce shouted, "it isn't—"

Carr fired. The mercury bullet hit the armor-plating of the chitinous exoskeleton, thousands of silver particles exploding in a dazzling spray. The big beetle was not even dented. Straightening its forelegs it raised its head and antlers into the air. Between the antlers they could see its mandible jaws opening and closing. Carr tried to run and tripped, falling beside the petrified Magruder. He fired again.



Carr tried to run and tripped, falling beside the petrified Magruder. He fired again.

"It's only bluffing," Bruce said—but Khomich and Robinson were already in front of him, aiming for the great jaws.

The first nylon-bullets seemed to cause no damage—then the legs collapsed and the red antlers collapsed on the soft humus. A stench of

dead beetle hit their faces. Nobody spoke. Khomich and Robinson calmly reloaded their pistols, throwing empty clips into the long grass. Carr's brown face appeared over the grassy mound.

"What was it?" he shouted.

"A stag beetle," Bruce said quietly. "Quite harmless. They put on that display to frighten off predators."

"It didn't work with us," Khomich replied. To Robinson he said, "Well, we know the nylon bullets are effective with these creatures."

"Yes, sir."

Bruce watched them with contempt. "Welcome to our wonderful new world—what's that we hear? Nothing much, just the familiar human sounds of guns slaughtering the local fauna."

Even Magruder seemed to have forgotten which muscles were for smiling.

Robinson waited until Khomich was well ahead. "Was that animal really harmless, sir?" he said to Bruce.

"They use those antlers for mild wrestling matches with other males. The jaws could give you a gentle bite—if you got it into a corner and scared it badly enough."

"It looked pretty terrifying, sir."

"Don't apologize to me, Captain. It's the beetle that has the complaint."

"We'll know the next time we meet one of them, sir. I suppose it's lucky for us that evolution didn't let insects grow as big as lions and tigers—they'd be quite a handful to cope with."

"Not lucky, Captain—design. Beetles don't breathe like mammals, with lungs—they have air passages in their sides, *tracheae*. They take in oxygen by diffusion. Their system wouldn't support thicker bodies because there is no circulatory distribution of oxygen by blood. Didn't they teach you any of that at school, Captain?"

"I've been in the army since I was fifteen, sir. I wasn't much of a scholar anyway. Of course, the army teaches us fieldcraft—how to camouflage yourself in the open and to trap rabbits on survival courses."

"There are three hundred thousand different species of beetles, Captain. I don't suppose one stag less will change the course of evolution. They're probably laughing at us—in the end, our murderous instincts will only wipe out one species—ourselves. The beetles were alive millions of years before us, and they'll be alive long after we've gone—famines, blights, climatic changes, increased radiation—they'll survive."

"You think we'll be like the dinosaurs, sir—just a flash in the evolutionary pan?"

Bruce snorted. "The dinosaurs effectively ruled the earth for more than a hundred million years. *Homo sapiens* has been around for possibly half a million years. It will be one hell of a miracle if our flash in the pan lasts as long as the dinosaurs."

"You don't seem very keen on people—if I may say so, Sir."

"Ask that stag beetle back there how keen he is on people, Captain."

At last they reached the end of the grass forest. They parted the stalks of grass with their prods, having learned that the hard leaf-edges could cut, and found themselves looking out over a short stretch of bare, stony ground—and beyond that the purple ocean of the sky. Magruder looked at his quartz chronometer. "That took us too long. It's now fifteen minutes after ten and we've got to make Station Two before half-past six—it gets dark earlier down at this level because of all the shadows. We'd better eat here while we're in cover and then make tracks."

Between mouthfuls of brown cake-concentrate and gulps of water, Robinson said, "Just like army packrations—you don't know what the taste is exactly, but it isn't good."

"We'll see how you like a nice, juicy earthworm steak, said Lena Davidson. Khomich ate quickly, standing up. He wiped his mouth and brushed his hands. He wanted to speak to Bruce, but there was no way of drawing him aside without alerting Magruder and the Australian woman.

"I'm ready," said Anne Richards, briskly fastening her pack. Magruder patted her on the back, smiling at the others. "Isn't she terrific?" By now, they all shared an irritation with his determined cheerfulness, regarding him with blankfaced hostility, as if he were a professional fun leader in a holiday camp where the food was bad. "Now then, he said enthusiastically, "in real terms, that's only a drop of six inches or so." Pointing down to the stony earth, "But to us, it's the equivalent of around sixteen feet. What we normally do is—"

"I'm pretty sure Corporal Carr and I know how to fall down a little cliff," Robinson drawled, with a delicacy of insult so typically English even Khomich smiled.

"Right then," said the unabashed Magruder.

Bruce was lowering himself over the edge when their eyes were dazzled by a glinting blur of light.

"Look out, it's a bloody wasp!" Carr yelled.

The striped yellow and black body hovered in the air a few feet from

their faces, as big as an eagle, shimmering wings beating faster than their eyes could register.

The vast humming noise of its wings changed to an urgent whirr as it changed angle in mid-air, the countless facets of the compound eyes shining with a terrifying luster—apparently staring directly at them.

Chapter 12

Carr's first shot punched a black hole in the huge, multi-faceted eye. The glimmering wings faltered, then seemed to beat even faster as the wasp tried to maintain altitude. The second bullet hit the compound eye at an angle, ripping a black scar across the shining lenses.

The third bullet came from Robinson. It smashed into the brilliant black and yellow abdomen. The wasp hit the ground head-first. For a moment it tried to raise itself off the ground, then collapsed in a lurch, like an aircraft with a buckled undercarriage. One transparent wing buzzed frantically, a thin leg paddled against the hard earth, then it was still.

Pale, yellowish blood began to ooze out of the hairy abdomen.

"Good shooting, Carr," said Robinson.

The corporal dropped to the ground, landing easily on his toes. "I wasn't too sure if you'd call that a hard body or not so I used the nylon bullets anyway," he said, feeling pleased with himself, particularly when he saw the approving look on Khomich's face.

"Major Wollaston was right about your marksmanship, Corporal."

"Thank you, sir."

Khomich turned on Bruce, who was dusting off his jacket and trousers. "Just as well you have us crude soldiers to look after you, Professor."

"That happens to be a hoverfly, not a wasp. Still, if shooting it has satisfied some inner compulsion—"

Carr glared at him angrily. "That's a bloody wasp!"

"You're meant to think it's a wasp, but it's completely and utterly harmless. It's one of nature's mimics."

Khomich snorted, "Is it only *mimicking* when it stings?"

"For your information that is *Sericomyia borealis*, it doesn't have a sting. Mimicry of dangerous or poisonous creatures is quite common in nature—why do you think we're wearing these yellow and black uniforms? Birds are meant to think the hoverfly is a wasp so that they'll leave it alone. But even if it had been a wasp, it wouldn't have stung us—they're not like humans, you know. They don't zoom about *looking* for things to kill."

"If they can fool other animals, you can't blame us for not recognizing it," Robinson protested.

"I know," said Khomich, "next time we're attacked, we must all wait for the professor to tell us the bug's life history."

Lena glared at Khomich. "We killed off one world—you intending to kill off this one, you bastard?"

"Can we keep going now?" Anne Richards asked.

Magruder smiled at Carr. "We must move quickly across this open section—if the sky turns black, that might be our unfriendly neighborhood raven—you have full permission to blast it with everything you've got."

"We do not need your permission," Khomich snapped.

They skirted the dead hoverfly. Its great compound eyes had already lost all luminescence. With Carr and Robinson covering the rear, they hurried across the short stretch of open ground, boots slipping on smooth stones as they watched for danger from overhead. After the cloying humidity of the tall grass, the air was burningly dry, yet they felt a slight chill. Magruder pointed them towards a large boulder.

They reached its shadow and then gasped.

"My God! Look at that!"

They could have been on the very edge of limitless space.

Immediately below was the steep rockery slope and then a dark patch of green and black—beyond that, their eyes could not focus, seeing only a shimmering mist of dark greens and reds and blacks, vague shapes looming up out of a dancing, scintillating ocean—and, above, the blinding sky, a purple-blue so brilliant it seemed to come at them in waves.

"That's it, my friends," said Magruder. "That's Arcadia."

"Check your radio with Control, Magruder," Khomich said brusquely. "Find out exactly where we are on this map."

Magruder unclipped the radio pack from his belt and pulled out the transceiver's whiplash aerial.

"Magruder to Control, Magruder to Control..."

Robinson touched Khomich on the arm, nodding for him to move away from the others. Bruce was flat on his back, staring up at the sky. The two women were taking off their boots to smooth out wrinkles in their heavy stockings. Robinson pretended to be showing Khomich his pistol.

"The Australian girl was pumping me about what we're going to do when we find Professor Richards, sir," he murmured. "She asked me what orders you have."

Khomich took the pistol, squinting along its squat barrel.

"What did you tell her?"

"Nothing, sir."

"We're here to rescue the professor—there's no mystery about it."

"But they know that's not why we came here originally, sir."

"These people stole a large quantity of WFC equipment and this is where our investigations brought us. Professor Richards will have to answer to the Commissioner—our job is simply to find him." He raised his voice. "Yes, these miniaturization experts are very clever, Captain." Nobody seemed to be listening. Magruder was speaking quietly into the radio. Khomich lowered his voice again. "I don't trust Magruder or the girl—I want you to make sure he has no chance to use the radio without our knowledge."

"Major Wollaston will hear all transmissions in the Control room, sir."

"They may have another channel with a receiver we don't know about."

"Okay, sir, I'll keep close to him."

Khomich put his hand on Robinson's arm. "You find the girl attractive?"

Robinson blinked. "Hadn't thought about it, sir."

"Encourage her to talk—but treat her with maximum suspicion."

Magruder shouted at them. At last, Khomich released his arm. Robinson felt a strange sensation of having been near something he did not understand—something he instinctively disliked.

"Good news," Magruder said excitedly, "they're picking up a bleep from one of the capsules—it's in Section Twenty-Seven, near Crossing Two on the other side of the stream. That's where George was near when he called in, Anne."

"Do we know it's Richards in the capsule?" Bruce asked.

"Not exactly—but he's the only one who made contact after the last party split up." Magruder spread out his plastic map. "We're here—a couple of points too far east, but that won't matter too much. Our quickest route is down there to the right—" he pointed out across the rockery toward the shimmering haze of dark shapes and colors. "We've got about seven-and-a-half hours to get right across that big stretch and then climb the rockery to Station Two. I suggest we get a move on. Getting caught out in the dark isn't really part of the recommended

attractions.”

They pulled on their packs. “What are these capsules you keep talking about?” Carr asked Magruder.

“They’re for anybody who gets lost or injured—the Recovery Vehicle can lob them into almost every section of the garden. They have a life-support capability of about ninety-six hours—a refuge until somebody comes to find you. They’re only a temporary device until we finish the construction of all the Safety Stations we have planned.”

“If anybody lets us carry out all the plans,” Lena Davidson said bitterly.

“You’re always going to need technological backing from outside,” Bruce said as they started over the rim of the escarpment. “Kind of makes a mockery of the whole project, doesn’t it?”

“Don’t you think we’ve made incredible progress so far? We’re explorers, Bob, pioneers—we have to take it step by step.”

Small lumps of baked earth crumbled underfoot, starting little avalanches of grit and soil. On a steep, bare slope, Robinson lost his footing and slithered down to a gray boulder. As he stood, he put his hand against the stone. Immediately, he sprang back, face contorted with pain, violently shaking his hand.

“Captain Robinson pays no attention to stupid scientists,” Lena Davidson said with heavy sarcasm. “Don’t you remember Gerhardt Muller warning you that stones soak up a lot of heat?”

Robinson’s face flushed. As always, Magruder stepped in with the soothing oil. “You’ll have to forgive her, Hugh, I guess they don’t run to charm schools in Australia.”

“Shut up, you two-faced American creep!” She threw a lump of earth at Magruder, who ducked and came up smiling. She glared up the slope at him.

“Seems to be a bit of tension beneath all the smiles,” Robinson murmured to Khomich as they slithered past a smooth brown flint.

“I think they are acting for our benefit, Captain.”

Robinson decided that Khomich had been so long among the dirty work of the Security Department that his cynicism had become ingrained.

Khomich, however, was right.

As they climbed down toward an outcrop of purple heather, the humming noise became so loud they had to use the plastic earplugs of their communicators to speak to each other.

“Only bees,” said Bruce’s deep voice. “They won’t sting unless you

grab hold of them.”

Carr’s London voice said, “Don’t their stings cure rheumatism?”

“At our size, they’ll cure everything—permanently.”

As they came into the shadow of the heather copse, their faces contorted against the waves of sound. They put their hands to their ears, but it was not a noise that could be blocked out. It seemed to make their very bones vibrate. They began to run. Suddenly, on a low twig, they came face to face with a giant bumblebee, its heavy black body clambering over the small purple flowers with massive delicacy. Oblivious to their presence, the bee poked its head into the flowers, so close they could see its mouth parts opening and closing as its tongue-like labium penetrated down to the nectar. At the same time, a fine dust of pollen stuck to the yellow hairs of the bee’s stripes.

When the bee stopped drinking, its powerful, segmented legs began to brush the yellow hairs, collecting little sweepings of pollen which it methodically scraped from leg to leg before moistening it with nectar from its mouth and forcing the little ball into baskets formed by stiff black hairs on its rear legs.

“Are we going to stand here all day?” demanded Anne Richards.

Carr hit the gnarled heather branch with his stick. The bee spread its wings and rose straight up into the air like a flying bear—before zooming off in the sideways glide of a plane breaking formation.

“Congratulations—you didn’t even reach for your guns,” said Lena Davidson.

Carr gave her a lewd smile.

They reached a narrow ridge of hard earth, looking over another impenetrable forest of purple heather, the far reaches of the garden still a misty panorama of dark shapes and vibrant colors. Out of the purple sky danced two blue butterflies, huge wings throwing them around and around each other in a mid-air ballet of such power and grace they all stared in awe.

“It’s the courtship dance,” Bruce explained.

“You’re beginning to enjoy yourself, aren’t you, Bob?” said Lena Davidson.

“It’s a new perspective, I’ll say that. Maybe Towne did me a favor after all.”

“That is most gratifying to hear,” Khomich said drily.

The two butterflies gyrated down in ever-decreasing circles until they

landed on the heather immediately below them.

"Look," Bruce said excitedly. "Have you ever caught a butterfly and had dust come off its wings? You can see now—it isn't dust, it's scales. Butterflies as big as kites! Incredible."

"Pretty colors," Khomich sneered. "We go down to the right here."

"You're looking at *miracles*, Khomich!"

"No, just butterflies."

"Just butterflies? You know the painted lady migrates every year from the Sudan as far north as Finland? Two thousand miles on fragile wings like those? You know that out of every ten thousand caterpillars only about thirty manage to reach the imago stage—I mean turn into adult butterflies? Stop a minute—put your noses over that edge and see if you can smell anything."

"Is somebody carrying chocolate?" Robinson asked, sniffing again.

"No—it's the male blue, it smells of chocolate!"

"What happens to all the other caterpillars, then?" asked Carr.

"They get eaten by birds and flies and wasps and parasites that gnaw them from the inside. They're everybody's favorite snack."

"Glad to hear we're not the only murderers in the world."

"We're the only ones who've made it a pure art form. Everything else kills only to eat or to defend itself."

"You like all these poetical thoughts, Mrs. Richards?" said Khomich.

"Would it be barbarian of me to say we're wasting time with pretty butterflies while your husband may be dying?"

Anne Richards blushed. They started down the slope to the right of the heather. "Hey," Carr exclaimed. "Look what they're doing now!"

"That's the moment they were born for, the only reason for their existence—to give life to more butterflies."

"Back-to-back? Not much fun that way, I'd like to see what—"

"Corporal!" Khomich's face was red with anger. "No more of that filthy talk!"

"It's not filthy," Lena Davidson said slyly, giving Carr a wink. "He's quite right, back-to-back must be pretty joyless."

"Shut up!"

"Khomich lives in a joyless world," said Bruce. "All fun is filth and happy laughter is the chatter of a light machine gun."

Regaining control of himself, Khomich said nothing but nodded meaningfully, as if agreeing with some decision he had just made with himself.

Bruce held Anne Richards's hand while she slithered down a scree of loose grit.

"I'm sorry I held us up—I was carried away by those butterflies," he said. She straightened up, pulling her hand away. Her face was bitter.

"I don't suppose you care what happens to George, anyway. It would be very convenient for your boss if he was never seen again."

"My boss?"

"Commissioner Towne."

"He's not my boss."

"Why are you here then?"

"Let's say Towne knows how to twist an arm. Still, I suppose it was worth it if only for that one moment back there."

Looking at the broad shoulders of Khomich a few yards below, she said bitterly, "Don't tell me he's here to admire the pretty butterflies."

Magruder waited until Lena Davidson had climbed down through a waist-high clump of red filmy fern, its delicate fronds brushing moistly against her hands. "They're not saying what orders they have," she murmured. "It must be serious or Khomich wouldn't be here in person."

"We'll lose them in the morning when we're over the other side of the rockery."

"What good will that do?"

"By the time they blunder about with no radio, we'll have found George—Jany is getting the Recovery Vehicle round to the east wall opposite Station Three. George can be back to full-size before they get out of the garden—he'll know how to deal with the Commissioner."

"Robinson is watching us."

"Slap my face."

She raised her voice. "You're a toad, Stanley Magruder." She hit him across the cheek with her right hand. He winced.

"That hurt, for God's sake!"

Robinson averted his eyes.

"Are they going to get out of the garden?" she asked quietly.

Magruder looked down at Khomich, smiling broadly. "If they're very, very lucky," he murmured.

Chapter 13

At the bottom of the steep slope, they had to clamber through a narrow spread of ivy growing up toward the western end of the rockery. The big, smooth leaves gave off a powerful odor, like a mixture of carrots and petroleum. In some places, the leaves were only chest-high, making it feel as if they were wading through a sea of green leather—then, where the cable-thick creepers rose to form an arch, they found themselves in a shady green light, canopied by leaves as big as shop-awnings. Carr and Robinson started stamping down on the soft black soil as more springtails catapaulted over their heads.

“You have to regard them as friends, Hugh,” said Magruder. “They could be one of our best food sources.”

“I think I’d prefer army field-rations.”

Bruce noticed that Khomich held back until all the springtails had dispersed. If it had been anyone else but Khomich, he would have said the man was scared.

Magruder let Carr get ahead of them. “I saw Lena bending your ear back up there in the grass, Hugh,” he said quietly. “Take my word for it, she’s a real bitch. What was she talking to you about?”

“She wanted to know what’s going to happen to Professor Richards.”

“Did you tell her?”

“I don’t know myself.”

“Seems obvious to me—the commissioner has caught him with his pants down and old man Towne won’t waste a chance like that. Listen—it was never my idea to steal that equipment. I think George has got what’s coming to him, really. I just hope the project doesn’t suffer.”

“I thought you were all devoted to Richards—like disciples.”

Magruder looked around. He nodded conspiratorially. “I’m devoted to the project, Hugh, not to George’s power games. Lena’s the devoted one. Look, Hugh, I’ve got to be very careful, but I know a lot about this place, I’ve been involved almost since the start. I mean, if they needed

evidence—”

“You’d testify against Richards?”

“Yeah, I guess I would. You know how it is.”

“Saving your own skin? You’d want immunity for yourself, of course.”

“Exactly. And protection from fanatics like Jany and Muller. What’s George going to be charged with, anyway?”

Robinson had felt the question coming all along. He put on his frankest face. “Khomich doesn’t tell me everything.”

“It would be nice to know what I’m involved in. And Hugh—watch yourself with Lena, she may try to corrupt you.”

Robinson snorted. “I wouldn’t have thought corrupting *men* was her style.”

You think she’s butch? Don’t you believe it, man!”

They came out of the ivy into sunshine again, facing a stretch of soft black earth which to them looked like a vast field of lumps as big as boulders and chasms deep enough to swallow them up.

“I think we should take a rest before we start across that,” said Magruder.

Khomich snorted. “You tire easily for one so young.”

“All right, if you have to know—I have to go to the bathroom. Give me a couple of minutes.”

“Let Robinson go with you—in case some of nature’s miracles see your tender spot.”

“You kidding?”

As soon as Magruder was out of sight, Robinson strolled back toward the spread of dark green leaves, trying to listen for Magruder’s voice. Through the incessant droning and humming and buzzing from unseen armies of insects he heard no other sound.

Khomich nodded for Bruce to leave the group, both of them edging away from where Carr and the two women were flopped on a little tuft of grass.

“I have told Robinson to make sure Magruder doesn’t use the radio without our knowledge,” Khomich said.

“Why?”

“I don’t trust them. The girl has been asking Robinson what orders we have. Has it occurred to you that apart from the people in that house nobody knows we are down here?”

“The Commissioner knows.”

"But he is a long way away."

"Major Wollaston is in the house—"

"These are scientists, people full of trickery. Would you have expected Jany to cooperate so easily? He knows the Commissioner sent us and he knows Richards will be punished—yet there was no resistance to letting us come down here."

"He said he wanted everybody to see the potential of Arcadia."

Khomich hissed between clenched teeth. "Ridiculous. Listen—if you go to arrest a man, he tries to escape. And his friends do not normally give you every assistance to catch him."

"You've spent your life with the wrong people, Khomich. We're not *all* devious homicidals.

"No? They could have had Richards picked up by their Recovery Vehicle—or another rescue party."

"What is Anne Richards doing with us, then?"

Khomich took off his hat and patted at his hair, apparently puzzled by its new softness. "I'm glad she is with us; she is our best guarantee of safety." He frowned. "Unless—do you know if she and her husband are on good terms?"

"You mean this might be George Richards's way of getting rid of her? For Christ's sake, Khomich, you're as bad as the commissioner."

"No, I am not like the commissioner. I do not have people thrown out of windows simply as a precaution."

"A precaution? But you said Larson tried to warn Richards—"

"That's what Towne told me." Khomich shrugged indifferently. "You think the commissioner stays in power by means of fatherly interviews on the network?"

Anne Richards stopped in mid-sentence, her eyes widening in disbelief.

"What's wrong, Anne?" asked Lena Davidson.

"Look—my pack. It's moving!"

She jumped to her feet.

The pack went on moving. She had put it down on what looked like a little pile of dry sticks and leaves—and now the little rubbish pile was crawling away from her.

Bruce and Khomich came running over, Khomich with his pistol out. Bruce walked round the moving pile, holding up his hand to stop Khomich from shooting it.

"What's wrong?" shouted Robinson, coming out of the ivy.

"It's all right, it's a green lace-wing larva." Bruce lifted the pack off the moving pile. "You want to see its head?" Nobody moved. "It sticks all this stuff on its back as protection. See the dry husks of all the small insects it's eaten?"

"How revolting," said Anne Richards, with a little shudder. "God, I *hate* this place."

Suddenly, Khomich rammed his pistol in his belt. With both hands, he grabbed a smooth, brown pebble as big as a dustbin and jerked it out of the soft soil, knees braced, big veins throbbing on his neck as he lifted it above his head. He swayed for a moment—then dropped the big stone on the living pile of rubbish, squashing the lace-wing larva out of sight. He stood there panting, teeth bared in triumph.

"What the hell—what did you drop a rock on it for?" Bruce demanded incredulously.

"It was quieter than the pistol."

"Why did you *kill* it?"

"Why not?"

"But it wasn't doing you any harm!"

"It won't do any harm now."

Why not? Until then his dislike of Khomich had been instinctive, almost a defensive reflex, not so much a detestation of Khomich the man, but of what he represented; part of an apparatus his own quirky sense of individualism had led him both to fear and despise. Why not? Two simple words—and a shrug—all you ever needed to know about man's incurable brutality. Just for a moment he had a blinding urge to pull out his pistol and blow Khomich's head off.

"You're a very strong fellow," Lena Davidson said sarcastically.

Khomich seemed to be in a good mood. "You don't like strong men? You prefer bulging brains?"

"I prefer maturity to childishness."

"Ah—*maturity*? You scientists know all about maturity, of course, asking us to become midgets and live down here with all these *disgusting* creatures."

"Sadistic bastards who put people in front of a firing-squad because they're hungry—that's what I call *disgusting*."

Khomich's face became impenetrable.

"Come on, let's not get into arguments," Magruder said, "we must—"

"I saw the film of the London riots, she went on, her mouth tight with bitterness. "I was physically sick. Somebody should drop a rock on *you*."

Khomich turned away, picking up his pack.

"Did you get a special kick—seeing a woman shot?" she shouted.

Robinson prodded her shoulder with his forefinger. "Don't speak to Staff-Commander Khomich like that."

"Don't you lecture to me, you overgrown boy scout! He's a bloody murderer and you're his—"

"I gave the order for those people to be shot," he said curtly. Khomich frowned, gesturing for him to keep quiet. Magruder stared at him unbelievably. "You gave the order?"

"I was in command of the SD squad. There are mandatory punishments for riots—if those agitators had not been executed, the alternative would have been a collective sanction against the people of the Inner London area—no food for ten days. I decided it would be unfair to make innocent people suffer for the hooliganism of a small minority. Get your facts right before you make silly statements—nobody enjoys giving the order to a firing-squad.

The bleeping noise came from Magruder's radio pack. Still staring unbelievably at Robinson, he unhooked it from his belt and slipped the transceiver out of its canvas case, holding it against his cheek. "Come in, Control."

They watched, unable to hear what he was saying. Suddenly he began to wave at them. "Understood, Control," he said, "taking shelter now." He rammed the black transceiver into its case. "Let's get back under the ivy—Recovery has spotted the raven. They're going to shoot it."

"Why do they want us to hide in the ivy?" Khomich demanded.

"It's moving about the garden, they're going to blast it as soon as it's in the air. You want to be underneath a bird the size of a goddamn house when it hits the ground?"

"The ivy is no protection—we will get into one of these trenches in the soil." They grabbed their packs and started to run.

"It's heading for the chestnut tree in Section One-Seven," said the voice on the radio. Khomich spread his map against the crumbling surface of the big mound of soil. "That's on the other side of the garden," he said. "Why don't they shoot it now?"

"They're using a shotgun—they might hit some of the people we're

looking for.”

Carr cautiously raised his head above the level of the narrow trench in which they were cowering. “Hey,” he said, “there’s something moving over there—under the earth.”

They craned to look, pistols drawn.

“What is it?” said Anne Richards, crouching under the earth boulder.

A few feet away, where the soil was almost flat, they saw the surface heaving—and then it broke. Out came the tipped head of something as big as a boa constrictor. The tip seemed to test the air.

“Bloody hell,” gasped Carr, “it’s a big red snake!”

The thick, ringed body began to slither up out of its hole, a deep ox blood red on top and almost pink underneath. They were so close they could see small hook-like bristles all down its sides. The ringed segments bunched and then gave a muscular forward surge—sending the thick red body straight toward them.

Carr and Robinson took aim.

“Do they give medals for shooting earthworms?” Bruce asked drily.

“That’s a snake!”

“No, that’s *Lumbricus terrestris*, the gardener’s friend. Every year they move about eighteen *tonnes* of soil to the acre. Pity to massacre such a hard-working chap—even if he/she is a bit kinky. Anyway, even if you blow him/her in half, you’ll only end up with two worms.”

“What do you mean—kinky?” Carr asked.

“They’re both male and female. When they mate, they do a double-exchange.”

Carr’s expression was cheerfully obscene. “You mean they can’t just make a circle and charver their own—”

“Corporal!” Khomich barked.

The worm’s tipped head seemed to sense their nearness. The gleaming body twisted in another direction.



Out came the tipped head of something
as big as a boa constrictor.

“Raven now on the main rockery east of Station Three, said the voice on the radio. “We’ll zap him the moment he gets up in the air.”

“It isn’t a raven, it’s a hooded crow,” said another voice.

That was when they saw a big black bird come swooping low across

the garden, landing in a rush of beating wings and then hopping toward them.

In their panic, they thought it was the crow. Carr fired off a shot before he scrambled down with the others at the bottom of the trench. Only Bruce remained standing.

"It's a blackbird," he said, looking down at the frightened faces, "crows don't have yellow beaks. It's after the worm." A shower of earth and grit rattled down on them.

They cowered in fear. Bruce dusted his face, blinking to clear his eyes. "Don't be frightened," he drawled, "you're missing all the action."

First Robinson then Carr looked nervously over the rim of the trench.

Only a few feet away, towering over them like the wing of a plane, were the jet-black feathers of the cock blackbird's tail. Its yellow claws and legs were scrabbling for a grip on the loose earth as it tried to drag the big worm from its hole.

With its tipped head twisting frantically against the cruel vice of the yellow beak, the rest of the worm's long body was as taut as stretched elastic, at least half of its bristled segments still fighting to keep a grip on the sides of its hole. The blackbird was playing it like a fisherman with a salmon too heavy for his line, giving a little and then jerking back quickly, trying to tug the whole worm out of the hole without tearing it in half. The clawed feet sent another shower of earth into the trench.

When they looked up again, blinking away the dust, the blackbird seemed to be winning the inch-by-inch battle.

"He's coming up—stand by," said the voice on the radio. An avalanche of sound came at them in one gigantic boom.

Seconds later, they felt a tremor under their feet and heard the alarmed clacking of the blackbird as it fled for the bushes.

"Okay, Magruder," said the radio voice, "we killed your crow. You can come out now."

Carr was the first to scramble out of the trench.

"What's he doing?" Robinson asked, trying to get a toehold in the crumbling wall of loose earth. Then his eyes opened wide. "My God!"

Carr had his boot on the worm's front end, pinning it to the ground while he dragged the length of pink nylon rope from his pack. They watched him in amazement. He double-looped the rope and then dangled the loop in front of the worm's twisting front end, yelling triumphantly as he dragged the loop under the ringed body.

"Carr!" Robinson yelled, "stop that at once!"

"We'll have him with fried onions," Carr shouted gleefully, leaning back on his heels. "Grub up, folks!"

The worm telescoped its deep-red frontal segments in a frantic effort to reverse into its tunnel. Carr's boots dragged on soil. He took a double-handed grip on the rope and dug in his heels.

"You people are *mad*," Lena Davidson snapped.

"Carr—we're not here for tug-of-war matches with bloody earthworms!" Robinson shouted. Khomich held his arm.

"Give the corporal a chance to beat the bird, Captain," he said, smiling jeeringly at Lena. "Your micropeople must learn to catch their food supplies."

Leaning so far back he was almost seated, Carr began to win his tug-of-war, timing his heaves just before each bunching of the worm's muscular segments. Inch-by-inch, the bristly body was pulled out of the hole, past the thick saddle of the clitellum, then the flatter, pinker segments of the rear end.

Its resistance ended abruptly, its flattened tail coming out of the hole in a fast slide. Carr sat down heavily, out of breath, but laughing. Robinson ran across to him and grabbed the trailing rope as the worm began to thrash about wildly.

"If we lose this rope, I'll put you on a charge, Corporal," he snapped. "You're a fool."

Together they pinned the worm down with their boots while Carr loosened the loop. They dragged the rope clear. The worm looked slightly fractured at the front but still managed to squirm down into another crevice in the earth.

"Why the hell did you do that?" Robinson demanded.

Carr laughed guiltily. "I don't know, sir, it just came into my head."

"Do anything like that again and I'll have your guts for garters. Is that understood?"

"Yes, sir. Sorry, sir."

"Don't be too hard on the corporal," Khomich said benignly, "at least he has shown our friends here how to catch their dinners." He laughed uproariously. So did Carr. For a second or two, they looked like uncontrollable adolescents. Khomich kept pointing at Magruder and then doubling up. "You are going to live here and play tug-of-war with worms for the rest of your midget's life?"

They started to hurry across the lumpy, fissured earth in silence,

Khomich's face once again impenetrable.

"You think it's a ludicrous idea living down here?" Magruder said bitterly. Khomich ignored him. Magruder jumped from one mound of earth to the next. "I saw this network show a few weeks ago, the usual old crap—hope for the hungry masses. Wait for it—WFC's brilliant brains are finding a way to utilize all the water hyacinth choking rivers in Africa. They're going to run great herds of hippopotamuses, like steers in old Texas—the hippos eat the water hyacinth and then we eat the hippos! You actually believe all that crap, Khomich? We're going to feed two billion people on hippoburgers?"

Robinson was beginning to hate Magruder. He turned on him angrily. "WFC's agricultural experts are reclaiming blight land every year, hundreds of thousands of hectares. It won't be long before—"

"You learn that by heart at the army indoctrination class, Hugh?" Magruder jeered. "The old temperate zones don't get enough rain to grow big wheat harvests any more. Even if we had the rain, we don't have the manpower to harvest the stuff. We're past the point of no return—you want to sit on your asses watching WFC propaganda shows and thinking happy thoughts until the day you're too weak to walk down the road to the ration center? Or maybe you see two billion people shipping to Africa to be near the hippo ranches? When the hippos are all eaten up I suppose we all move to Australia and eat the kangaroos? We're going to need a helluva lot of ships."

"So we all come down here and live like bloody insects?" Robinson shouted, helping Anne Richards across a narrow crack in the earth.

"This garden could support thirty thousand people our size. The insects aren't doing too badly—you know what insects are made of? Proteins, fats, carbohydrates, minerals, vitamins. You ever tasted locusts, for instance? Like a cross between veal and tunny fish. When was the last time you had a slice of veal, Hugh? Look round you—this is the garden of plenty! Worms and all."

"It's horrible," said Anne Richards. "I hate it."

"You could learn to adapt. How about that little fly, *Psilopa petrolei*—how did it learn to live on the petrol pools around the Californian oil wells? If a fly can learn to live off petrol, we can learn to live down here, can't we?"

"Robinson waited until Magruder was taking a breath. He put on his most cutting voice.

"With a voice like yours, I'm surprised you bothered to bring a radio, Magruder."

“Very funny. You English are very comical—when you re not running a firing-squad.”

Bruce could stand it no longer. “Shut up, both of you, he growled.

“Bob’s right,” said Lena. “Keep quiet, Stanley.” But Magruder couldn’t keep quiet for long. As they reached the other side of the strip of recently-dug earth, they came to a dandelion plant, its pale stalks crowned by huge white balls of gossamer fine seeds. Magruder hit one stalk with his stick, dislodging dozens of seeds. They floated off in an imperceptible current of air, the seeds hanging under their silken hairs like so many tiny parachutists gliding slowly to land. Magruder brought his short-handled machete out of its sheath and sliced neatly through the stalk, which toppled to the ground, making them duck.

“You are a fool,” Khomich snapped.

“There’s method in my madness,” Magruder said cheerfully, hacking at the stem with his knife. He held up a piece of stalk. “Thirsty, anybody?” he said. “Try some dandelion milk.”

“Sure it isn’t poisonous?” Carr asked.

Magruder looked hurt. “Would I do that to you? Come on, it’s okay.” Carr looked at the yellowish pipe. The flesh was pulpy, with a white liquid oozing from the cut fibers. “You try it first,” he said suspiciously.

“A guy who wrestles with giant earthworms—scared of a little dandelion juice? You want to try some, Hugh.”

“I wouldn’t,” Bruce said, “not unless you’re suffering from constipation. Didn’t you ever keep rabbits as a kid? Dandelions have a laxative effect.”

Khomich moved closer to Magruder. His face gave no warning—he brought his prod down heavily on the Stalk, knocking it out of Magruder’s hands. Magruder started to protest—but Khomich raised the stick until it was pointing into Magruder’s throat.

“You think it’s a joke to trick us into eating something that gives rabbits diarrhea? Next time you try a joke like that, I will make you eat this stick.”

“I’ll take some of the goddamn stuff myself if it—”

“What was that?” Anne Richards said quickly, ducking her head. It had been something dark, passing over their heads with an urgent humming sound. They stared up into the emptiness of the infinite sky. “It is too dangerous out here in the open,” said Khomich. “We must hurry.”

They helped each other across the last few yards of crumbling earth and came to a head-high brick wall comprised of only one brick. While

Robinson and Khomich covered them with their pistols, Carr pulled himself up onto the brick and then grabbed Lena Davidson's hands as Bruce gave her a shoulder-lift. Again they heard the humming noise overhead. Lena Davidson sat on a patch of silvery-tipped green bryum moss while Carr pulled Anne Richards up onto the brick. Again, a dark shape passed over their heads.

"It's only a fly," said Magruder, throwing up his pack. "Listen—we cross this cinder path and then we're in the shrubbery—we don't want to make too much noise in there, so put in your earplugs and use the communicators."

"What's in the shrubbery?" Robinson demanded, forming a step with his hands for Magruder to stand on and then pull himself up.

"Nothing to be scared of," Magruder said patronizingly, reaching down to grab Robinson's hand, "just that some of the residents tend to come over hungry all of a sudden."

This time the humming noise was louder and then it was hovering just above their heads like a small, lethal helicopter—a big brown fly, wings beating so fast they would have been invisible but for the blurred arcs of iridescence, sunlight glinting on veined sheets of chitin beating at almost two hundred times a second, so close they could see a vivid slash of red pigmentation across the huge green orbs of the compound eyes.

"Well then, Professor—another mimic is it?" Khomich asked calmly, still waiting to be pulled up onto the brick.

"*Tabanus*—it's a horsefly. At our size, it could probably suck us dry. Looks like it's caught our scent—"

"Shoot it then!"

"Should I shoot it, Professor?" Robinson asked. Bruce said nothing, unable to take his eyes off it.

"Shoot it, you fools," Khomich yelled as he tried to dodge out of the way.

The fly darted sideways and then hovered again, as if on a string, the countless lenses of the green eyes giving no indication that it had seen them, yet none of them in any doubt that it was watching them, machine-like, malevolent.

It dropped again, the humming of its wings drowning Robinson's voice as he yelled at Khomich. "I can't shoot it—I'll hit you."

Khomich slashed at it with his stick, close enough to its white-haired face to see the scimitar antennae and blade-like mandibles which could draw blood from a man or a horse.

"Get down on the ground," Robinson shouted hoarsely. Khomich

didn't hear. He crouched to dodge it—then broke into a run for the nearest vegetation. The horsefly followed him. He stumbled into a depression of wet earth, boots slipping as he fumbled for his pistol. The fly hovered above him, as big as a hawk. He ran through some soft green moss and then dove forward in a headlong roll, trying to hide himself among some large, flat leaves dotted with pink stalks. The fly's shadow passed across his face. He lay flat on his back and pulled out his pistol, barely conscious of a sticky sensation on his neck. Carr vaulted down off the brick. He ran toward the plants, his pistol drawn. Standing knee-deep in the velvety moss, he took careful aim, both arms fully-extended.

The mercury bullet hit the tabby fur of the thorax, just in front of the wing muscle. As if caught in the blast of a vicious wind, the horsefly skidded through the air, disintegrating in an explosion of pale blood and horny fragments.

"Got him, sir."

"So did I!" came Khomich's voice from the circle of flat leaves. Slowly he sat up, chin trembling.

"Another second or two and the world would have been a happier place," Magruder murmured as they looked across from the brick.

Khomich brushed irritably at the stickiness on his neck and started to rise, angry at his own display of panic. When he found that his leg muscles were not responding properly, he closed his eyes and breathed deeply. His heart was racing. With an effort of will, he took control of his body and then jumped to his feet.

Pink tentacles tipped with little red bulbs brushed against him. He slapped them away, revolted by their stickiness, preparing to cover his shame with a display of anger.

"It's all right—you can come out now, sir," Carr said. Khomich caught a trace of mockery in the corporal's voice.

"What do you think I'm doing?" he snapped, kicking out at the pink stalks which seemed to be clustering round him. He screwed up his face in disgust, holding up his arm to shelter his face as he pushed through the undulating stalks which stood up from the horizontal leaves.

"For God's sake!" he growled, feeling something pulling him back. "Give me your stick, Corporal, this damned weed is—"

His mouth dropped open. He frowned. No, it was impossible. He kicked out savagely. The red bulb at the tip of the pink stalk was sticking to his leg. Another was sticking to his neck. He pulled it off—another red bulb attached itself to his hand!

He looked over his shoulder. The stalks were swaying toward him, bending over like the tentacles of a sea anemone. He hit out at them—but suddenly his arm was being gripped.

“Help! It’s sticking to me!”

Carr strode across the moss, shoving his pistol into his waistband. He saw Khomich wrestling with a lot of thin branches.

“What’s wrong?” Robinson shouted. Carr looked across at them.

“The staff-commander has found a sticky plant, sir,” he replied, with a straight face.

“Don’t stand there shouting your silly head off,” Khomich snarled.

“Give me your stick!”

“I left it back there, sir. Don’t worry, I’ll get you out of that.” Carr stepped onto one of the flat leaves which came out on hairy stalks from the base of three tall stems carrying white flowers. The pink fronds sticking up from the leaves made them look like hairbrushes. One of the red tips touched Carr’s hand. His skin was immediately covered by a sticky, glistening syrup. “Funny sort of plant,” he said wryly. “Touch it and it bleeds honey. Give me your hand, sir, I’ll pull you—”

Khomich’s eyes were desperate. He twisted and slapped and kicked, but the more he struggled, the more he seemed entangled. Wherever the red bulb at the end of a frond touched him, there was a sticky fluid. And once the bulb touched him, it would not let go.

He broke one tentacle and then tried to charge his way out, head down, eyes closed.

He could not move!

Chapter 14

“It’s sticking to me!”

Carr jerked back his hand. The tentacle kept its sticky hold. Another tentacle bent gracefully to join it. It was as if they could see.

Carr panicked. He pulled his pistol and started firing shots into the leaf.

Khomich found himself being dragged to his knees, his muscles beginning to tire. He tried to bite at a frond, wrestling this way and that like a tethered bear.

“What’s he shooting at?” Bruce demanded, trying to see what they were doing in the vegetation.

“I thought he was shouting something about a sticky plant,” said Robinson.

Anne Richards put her fingers to her open mouth. “The sundew,” she gasped, “George said there were some in the garden.”

“Sundew?” Bruce hesitated for a split-second, then jumped down off the brick. “It’s a plant that eats insects,” he shouted up at the others. “Give me your knife, Magruder.”

When they reached the green moss, Carr was still firing at the leaf. Khomich was almost hidden by pink fronds, still struggling violently. Bruce grabbed the machete from Magruder. “Keep your eyes covered,” he shouted, jumping between two of the broad, horizontal leaves into the circle under the tall flower stems. With a couple of savage cuts, he severed the stalk of the leaf on which Khomich was trapped. The hooked tip of the knife sliced through the tentacles clustering onto Khomich.

“Keep your eyes closed until we can wash them out,” he barked, turning to slash at the stalk of the leaf which had Carr trapped.

Khomich swayed back and forth on his knees. Bruce pulled the loose-hanging fronds off him. “Why the hell didn’t you realize they were caught in a sundew plant?” he snapped at Magruder. The young American made an apologetic shrug. “It all happened so fast—sorry.”

“Get something to wipe this stuff off their faces and hands—it’s a digestive juice, it’ll eat through the skin. Pour plenty of water on them.

Here, Khomich—splash some water into your eyes—be careful, that stuff could blind you.”

Khomich said nothing until they had climbed onto the brick and were crossing an old cinder-path, using plantain leaves and patches of moss as stepping-stones over the yielding surface of abrasive ash.

“What did you say was the name of that—*plant*?” he asked stiffly.

“The sundew—it’s an insectivorous herb,” said Lena Davidson.

“What would it have done to me?”

Waited until its digestive juices had absorbed your flesh and then just sucked you in.”

Khomich spat.

Magruder looked at his chronometer. It was noon. “If we’re going to make Station Three before dark, we’re going to have to move along. They hurried toward the wall of bricks at the other side of the path, climbing down into a lush meadow of chickweed. Its bruised leaves and stalks gave off the sweet smell of fresh garden peas. They swatted at little black flies which Bruce said were chalcid wasps, hyper-parasites which layed their eggs in the living cocoons of other insects like the ichneumon fly. The ichneumon had already layed its eggs in the body of a caterpillar. While the ichneumon larva ate the living caterpillar, the chalcid larva prepared to eat the ichneumon larva.

“A man called Maeterlinck described this as a world more insensate, more atrocious, more infernal than ours,” Bruce added wryly.

“Thoreau said, ‘Man is but a guest on the planet,’” Magruder chipped in, winking at Robinson behind Khomich’s back. “All this was going on millions of years before we arrived—it’s all part of nature’s great scheme.

Khomich spat again. “Nature should be abolished,” he growled.

Ahead of them loomed the gigantic shapes of dark bushes, their topmost branches and leaves far above the range of their vision, towering mysteriously like skyscrapers in a fog.

Lena Davidson winced and stopped to massage her leg, holding onto Anne Richards’s shoulder. Robinson couldn’t hear her voice, but there was something suspicious about the way they were murmuring to each

other.

“Can I help you?” he said loudly.

The Australian girl grimaced and tested her leg. “Just a touch of cramp,” she said. “It’s better now.”

Wading through the soft green chickweed, Bruce almost walked into something large and bulky. He waved at the others to stop, cautiously pushing green leaves aside with his prod. He was looking at a drab olive skin with rows of tough tubercles, all of it glistening with slime.

“What is it?” Magruder hissed.

“Great gray slug by the look of it.” He parted the chickweed until he saw the erect stalks of the eye-antennae tentatively probing the air; one touch of the prod and they instantly pulled back under the thicker skin of the mantle, the whale-like body freezing.

“Hey,” Magruder called cheerfully. “Anybody want a ride on a slug’s back?”

Khomich stared unbelievably as the huge slimy body oozed soundlessly into the chickweed in a trail of white mucus. Khomich had lived with fear all his life, from his hungry childhood in the famine years when marauders from the towns had slaughtered every man, woman, and child of the collective farm—missing only the boy who had climbed into the cesspit; he had wandered alone across a Europe where living skeletons chewed on roadside grass, a boy aged fourteen who had killed men for as little as a single potato and who had eaten human flesh; Khomich had survived because, for the intelligent, fear is the great teacher—he took no step that was not calculated, he turned no corner blindly, he suspected all men at all times, he took precautions while braver men jeered—foolhardy men who now had not even gravestones to corroborate the vague rumor of their forgotten lives.

Now, for the first time in his years, he felt helpless and inadequate. How could a man fight a plant which behaved like an octopus?

Only the thought of jeering laughter kept him from screaming; it was more than just the memory of sticky tentacles feeling for a grip on his flesh, more than physical revulsion at the slimy skin of the slug; he heard an echo of taunting voices—deep inside himself he felt a stirring of madness and evil. He was near Robinson, yet he dared not look into the young Englishman’s eyes, fearing they would mirror a slime no bullet could penetrate.

They were resting in a patch of sunlight coming down through the tangled arches of a wild rose bush. The ground was covered with white petals large enough to use as blankets. Occasionally, other petals would come floating down in a seesaw dance through the vast canopy of spiked branches—soft, creamy petals no heavier than sheets of silk. Carr got under one as it slipped toward the ground, balancing it on his head like an oversized sombrero.

“Save your strength, you idiot,” Robinson said wearily, taking off his boots to shake out little bits of grit. Magruder opened up the aerial of the transceiver and started to call Control for another bearing. Bruce took a long drink from his water-bottle. His hands felt cold. Carr sprawled full length on a bed of petals. “The perfumes so strong you could get drunk on it,” he said.

“Maybe we’re the first people on earth to see paradise,” Bruce said reflectively. Khomich watched Magruder murmuring into the radio. Then he palmed the aerial back into its slot.

“We’re here in Section Fifteen,” he said, pointing at his map. “If anybody needs to go to the bathroom, now’s the time—we don’t want to stop any more than we can help.”

“I need to, but—” Anne Richards made a little grimace—“I’m scared to go into the bushes on my own.”

“I’ll go with you,” said Lena Davidson.

Looking like a pantomime stage prop, as big as a football, the red and black ladybird was moving slowly down the rough green bark toward a seething tribe of aphids, delicate little creatures with opaque yellow bodies and black legs. When an aphid came near the smooth black head, it was suddenly grabbed and dragged under the ladybird’s jaws. Its thin black legs were still moving jerkily as the ladybird chewed methodically through the soft yellow body. Oblivious to what was happening, other aphids wandered round the ladybird’s red and black shell, climbing over its splayed legs. Nearby a female aphid gave birth to a fully-formed miniature version of herself, one of the twenty or so daughters she would have that day, forcing it out of a hole at the rear of her abdomen. The ladybird went on munching, turning the carcass this way and that to consume all the juicy parts. When only the heads and legs were left, it simply moved forward and started munching on yet another aphid, the newly-born baby.

Having watched all this in a state of almost hypnotic revulsion, Anne

Richards lost her temper.

“You bloody murderer,” she said angrily, pushing at the shiny red and black shell with her stick. Until then the air had been cloyingly sweet with the heavy odor of honeydew—the excess sugar sap excreted by the greenfly aphids—but from the alerted ladybird came the foul stench of its defensive spray, a gas so repugnant they had to hold their noses. The red and black shell rose in two equal sections and it flew off with a whirring noise. The other aphids were walking unconcernedly round the half-eaten corpse of the baby whose existence had lasted less than sixty seconds.

“I suppose you think I’m silly but I hate to see creatures dying,” she said to Lena.

“The ladybird will die if it doesn’t eat.”

“I suppose so. It’s all—well, so complex. Tell me honestly, Lena—you really think Professor Bruce and Khomich were sent by the Commissioner to eliminate George?”

“Taking all our materials without official permission is just the excuse Towne needs—you know very well he stamps down on anybody who looks like a rival for his job. Once they have George in custody, I wouldn’t give a snap for your chances of ever seeing him again.”

“What will happen after we abandon them?”

Lena shrugged. “Does it matter? They’re Towne’s bully-boys, aren’t they? You worried what happens to a master thug like Khomich?”

“Not really, I suppose. It just seems so—well, brutal.” She looked up at the seething family of aphids. “Just like the insects.”

“Insects are automatons—they’re biologically programmed to display fantastic skills, but they don’t have any brains. You shouldn’t be sentimental about them—”

“That’s what’s wrong with us—we can imagine the worst.”

“It’s just as well insects don’t have imaginations or they’d have taken over the world by now.”

“What a horrible thought! Let’s get back among people.”

Lena smiled tolerantly.

They passed under a lavender shrub, its gnarled stems as thick as tree trunks. From the gray leaves came not a delicate perfume, but a strong smell of tar. Suddenly, they were walking under a host of low-flying midges as big as swallows. They swung at them with their sticks but the very force of air in front of the swishing stick seemed to shunt the

delicate little bloodsuckers to safety. They passed under the gray-green leaves of a sweet william catchfly, its bright pink flowers almost fluorescent in the sunshine. Still the midges danced above them.

"A scientist once came up with an interesting observation," Bruce said. "If all you knew was a midge and you measured it scientifically from every aspect of aerodynamics, you could prove conclusively that it's theoretically impossible for the albatross to fly."

"Why is that?" Carr asked.

"The midge beats its wings around one thousand times a second—it's got a system of automatic muscle contraction. Yet the albatross—with its massive weight—can glide along for hours without hardly moving its wings."

"So scientists don't know everything?" Carr said cheerfully.

"No—but they know what they don't know."

Carr frowned, trying to work that out. They came out onto an open patch of light sandy soil which Magruder said was the start of the old kitchen garden. "Scientists can be pretty stupid," Magruder said cheerfully. "Did Jany tell you about his fabulous giant wheat? They were using polyploidy—you know, extra chromosomes—and they came up with a beauty—an ear of wheat so big it could have fed the world! Only one snag—the ear was so heavy every single stalk would have needed to be tied to its own stake! Even the big brains at WFC couldn't see a way to harvest *that* without—"

The soil erupted round Magruder's feet. He had a glimpse of two big blades the color of iron clamping onto his ankle. For a moment, his face was petrified with fear—then he let out a scream that echoed far into the topmost branches of the biggest shrubs.

"It's dragging me down. Help me, *help* me!"



"It's dragging me down. Help me, *help me!*"

Chapter 15

They drew their pistols, but there was nothing to aim at. Magruder's leg was dragged this way and that in explosive flurries of dry soil. He clutched at the earth but the drag on his ankle was relentless.

"Do something, for Christ's sake!"

Their faces stared down at him, eyes wide with horror and disbelief. Most of his left leg was out of sight. Again he was dragged a few inches nearer the sinking earth of the hole.

"Shoot it," he begged. He was now flat on his back.

"Give me a knife," Bruce snapped. Only Magruder had a knife. Bruce knelt beside him. Magruder was yelling with pain, head twisting from side to side. His hips reached the crumbling rim of the hole before Bruce could slide the knife out of its canvas sheath. His leg was now fully extended. His body was too big to slide down into the hole but the unseen creature only tightened its remorseless grip.

Bruce lay down full-length and sank both his arms into the hole.

"What is it, for God's sake?" Magruder shouted.

"Just hold on—it's a tiger beetle larva—I'm feeling for its prothorax, if I can get the knife into the soft spot—"

"Oh, Jesus." Magruder went limp in a faint. Immediately, his body was jerked deeper into the soil. Carr and Robinson at last conquered the shock which had frozen their reflexes. They got hold of his arms.

"You want to pull his leg out of its socket?" Bruce growled, face red with the exertion of stretching down as far as Magruder's foot.

"Somebody get hold of me in case I'm pulled down."

Halfway down the vertical hole which was both its home and its hunting-ground, the tiger beetle larva stiffened its grotesquely misshapen body, sensing that its victim was no longer resisting, its huge head jerking with an electric savagery, the ploughshare mandibles tightening with a grip that was ecstatic in its ferocity. It had no real brain—but it needed no brain. Millions of years had gone into the perfection of its murderous skills. It had never been *taught* how to drag other creatures down into the stinking darkness of its lair, yet it had never been defeated, never deprived of its horrendous feasts.

In a frenzy of anticipation for the meal to come, its primitive but

highly efficient nervous system failed to respond to any danger signals. Again, it jerked savagely at Carr's inert body.

Bruce's hands felt across the cold, horn-like chitin of the prothorax head. He had his eyes closed, trying to translate tactile outlines into mental pictures, praying that he would not drop the knife to the bottom of the pit and be forced to try pulling the brute's head off with his bare hands, a battle he could not win. It was like wrestling with an armor-plated crocodile, an embrace with something so repulsive and so malignantly ferocious he had to bite his lip to stop his hands from recoiling involuntarily. Then he touched the soft membrane behind the prothorax.

In the narrow space, shoving his arms down the length of Magruder's leg and then past the huge head, he could not afford even one mistake. Eyes still closed, waves of blood surging through his head, he slowly maneuvered the knife, getting it into a double-handed grip, leaning so far down only the hands on his ankles prevented him from sliding over the rim of the ever-widening hole.

He held his breath—and rammed the blade into the soft skin, forcing it deep into the prothorax.

A stench of insect blood flooded up into his nostrils from the darkness below.

The larva twisted and threshed—and then began to slip. He let its weight slide off the knife. He lay with his face on the soil, not caring about the grit on his eyes and lips. Then he was sick—down into the hole...

It took half an hour for Magruder to stop sobbing. Leaning on Carr and Robinson, he tested his leg. His face was pale and drawn, as if he had aged ten years.

"It's numb," he said in bewilderment.

"I don't think there's anything broken," Anne said, running her hands down his skin and gently twisting his foot. "You may have deadened a nerve."

"Can you walk?" Khomich demanded.

The other two stood back. He took a step—and then sat down heavily, wincing with pain.

"No good," said Khomich, "we'll have to leave him."

"Leave me? You can't do that!"

Anne looked at Lena Davidson. The Australian girl frowned at her to

say nothing.

Magruder looked beseechingly at each face in turn. "You can't leave me. You couldn't get back to me before tomorrow night."

"You have your pistol and your prod," Khomich said.

Magruder became desperate, hearing nobody speaking on his behalf. "Let's call Control, maybe they can—" his mouth fell open. He looked down, slapping his hand on his belt. He twisted, looking behind his back. "The radio!"

"You've lost the radio?" Khomich barked.

"Look—the clip's broken—it must have fallen down that hole!"

They went to the edge of the hole. They could see nothing. They brought out their torches. At the bottom of the pit, they saw only earth.

"We need the radio," Khomich said. "Corporal, tie a rope around your —"

Carr's eyes widened incredulously.

"Climb down there? Not me. I wouldn't go down there for a million marks!"

"I am not giving you money, I am giving you an order!"

"Stuff your order. If you're such a bloody hero, you go down."

"Corporal!" Robinson said angrily. He turned on Khomich. "Look, sir, we'd have to dig out that earth and get ropes round that thing and pull it out of there before we could see the radio—it might take hours. I think we should press on, Sir."

Khomich's eyes seemed to swell. His cheeks were red. He started to fumble for his pistol, still glaring evilly at Carr. "I gave you an order, Corporal," he hissed. "We are on field-duty and therefore you can be executed for refusal to obey an order."

Carr began to back away. Bruce frowned. "He isn't serious, is he?" he said incredulously to Robinson.

The Englishman nodded.

"Are you just going to stand here and watch him do it?"

Robinson didn't know what to do. Khomich was well within his authority to execute Carr summarily for insubordination and from the look on his face he intended to do it. Short of physically stopping him—an even worse breach of discipline—there was nothing he could do.

"I should keep out of this, sir," he said quietly to Bruce.

"I shall count to five," Khomich said. Carr looked this way and that, preparing to dive for cover. "One," Khomich said loudly, "two—"

Bruce pulled out his own pistol. "Okay then, Khomich," he said, "you shoot Carr and I'll shoot you. Then Robinson can shoot me. I guess that

leaves the ladies to finish off Robinson. Funny way to run a rescue party.”

“Shut up, Mister Professor. This man is a soldier, he will do what I tell him, or—”

“You’re a fool, Khomich. If the radio is under that creature, its bound to be smashed flat. You going to kill a man for the sake of some broken micro-circuits and a plastic casing?”

Khomich hesitated.

“I think he’s right actually, sir,” Robinson said.

Khomich stared at the ground, his chin trembling with suppressed fury. Then he shoved the pistol into his waistband. “We are wasting time,” he growled. “We will leave this man and proceed—”

“No we won’t,” Bruce said firmly. “We’re here to save lives, remember?”

“We are here to arrest a damned criminal traitor!”

“What do you mean—a criminal traitor?” Anne demanded.

For a moment, Khomich lost all control. “Your husband is conspiring against the Commissioner,” he ranted. “You and all these *scientists* will be put under arrest and tried and—” he turned away abruptly.

“Is that right?” she asked Bruce.

“We’re not here to give him the WFC Star of Merit but there’s no order to arrest him. He’ll have some explaining to do, that’s all. Now—let’s stop wasting time. Robinson, you cover the rear. Carr—give Magruder your shoulder. We’ll head for—”

“Just a minute,” Robinson protested, “you can’t give us orders, you’re only—”

Bruce put his index finger on the young Englishman’s chest. “I don’t want to hear any more crap from you, son. You were prepared to stand there and let him shoot the corporal, so that rules you out as a source of common sense and logic. I’ve been deluding myself this was some kind of nature ramble—well, from here on, we’ll call it a sacred mission, with only one aim—to get out of this damned garden alive!”

As if to underline the lesson, everything they now saw seemed to proclaim the same threatening message. On a high branch, a praying mantis hugged the still quivering body of a large white butterfly to the terrible jaws of its green, anvil-shaped head, the two creatures locked in an embrace so intimate the ripping jaws might have been bestowing kisses. They walked on damp soil that seemed to seethe under them, soil

that was no longer mere dirt to be shaken off their boots, but a dry sea in which lurked the living-machines of death. A robberfly snatched a honeybee out of the air and rammed its dagger-like proboscis into the bee's abdomen, its gray mouth-beard caressing the paralyzed bee as it sucked it dry. They walked in silence, beginning to contemplate their own stupidity, beginning to share the same doubts. Man was blind. Man had only one superior asset—his unrivalled capacity for violence. Take away that murderous asset and what was there? Helpless, blundering man who inherited no skills and who had to build useless pyramids to feed his own concept of grandeur. Man the clumsy newcomer—man who had no relationship with nature—man who would have come and gone before the beetles had even noticed him. Man who arrogantly described the dinosaurs as a passing phase and yet had been on the planet for only that brief sixty seconds before noon. Man the insecure, murdering clown who would be the swiftest passing phase of them all.

They passed under the huge wooden wall of the old cucumber frame. In the damp shade under a broken plant pot, the gray woodlice trundled to safety from the vibrations of their feet, busy little armadillos leading a communal life that had lasted for millions of years and across which man was only a temporary shadow. That was the truth that faced them all—if man did not kill the other creatures of the earth they would have no reason for believing he existed. Man had to kill and slaughter because of his own agonizing insecurity, just to make the other creatures take him seriously.

Without his murderous violence, man would never have survived long enough to know the meaning of words. Because of his violence, he would not survive long enough to discover the meaning of his own existence.

They found themselves walking across a sheet of glass from the old cold frame of the kitchen garden, walking on their own mirror images. As they came to the fringe of weeds and grass at the edge of the glass, they were nauseated almost to fainting-pitch by the stench from what looked like the bloated body of a beached whale—but a whale wearing army boots.

Chapter 16

“Groebli!”

“How do you know it’s Groebli?” Anne asked, looking near to hysteria.

“Look at the hair,” Lena said brusquely.

“Let’s get away from here—they can come out and bury him when the maggots have cleaned off the skeleton.”

When they reached the beginning of the rockery slope, they had to stop to give Magruder a rest. Bruce nodded for Khomich to follow him to a short slope of hard, dry earth. They stood on a flat ledge of green-veined marble. In front of them, they could see the dead, yellow stalks of cabbages in the old kitchen garden and beyond that the cold frame. Overhead, the late afternoon sky was a haze of electric purple. From all sides and above, they heard the ceaseless dronings and hummings and chirpings and clickings of the unseen armies.

“The shadows are lengthening,” Khomich said quietly.

“I can’t see us making the top of this place before dark. I think we should look for a place to pitch the tents.”

“I agree—a cave of some kind perhaps.” Khomich scraped his toe against the dull marble. “I acted like a hysterical woman. It will not happen again.”

“Nobody can be sure how they’ll react in a completely new set of circumstances.”

Khomich gave him a look of gratitude. “We can leave Magruder in the Safety Station—he won’t be in danger there and we can make faster time. Let’s hope Richards is still alive.”

“Richards? We should start worrying more about ourselves. The hell with Richards—”

“You know what the Commissioner said.”

“The hell with him as well.”

Khomich stared out at huge blurred shapes in the middle-distance. “You are a very brave man, Professor, I would have let Magruder be torn to pieces by that creature rather than go within a mile of it. When

you and I first met, I was jealous of your courage in facing Towne. I told myself you were simply a stupid scientist who had never seen the reality of a Security Department basement but I was wrong.” He hesitated.

“You do not like me, but will you take my advice?”

“Let’s hear what it is.”

“Professor—if the Commissioner had Larson thrown out of a window as a precaution, what do you think he would do to you—somebody he knows is his enemy?”

“Let him try—I’ve survived three years in the Outlands, I guess I can keep out of Towne’s hands.”

“To get out of here we will have to go through that process. Who knows what orders Towne might give to Major Wollaston?”

“You mean—have me killed before I got back to full-size?”

“Yes.”

“You think Towne’s as mad as all that?”

It is very possible.”

“Christ. So there’s nothing I can do?”

“Yes there is. He is obsessed by his fears of a conspiracy. That is why we are here—to make Richards tell us who the Commissioner’s enemies are. As long as we have Richards, we are safe. Magruder has told Robinson that he is willing to testify against Richards. If we have them both in our custody, they will be our insurance. And once we are back to normal, you will have a chance to escape from the Commissioner.”

“I shouldn’t have thought it would worry you whether I lived or died, Khomich.”

Khomich looked down at the marks his boot was making on the dull white marble. “I respect any man who is braver than myself,” he said quietly.

“Okay then, that’s it. We press on as fast as possible and find Richards and then get the hell out of this place.” He touched Khomich’s arm. “I really mean it, Khomich—thank you.”

Khomich looked away, embarrassed. They climbed down.

“We’ll look for a place to pitch the tent,” Bruce said. “We must be under shelter by twilight.”

“There isn’t much twilight down here,” said Lena. “Suddenly, everything is just switched off.”

Bruce was waist-high in glossy leaves edged with fine hairs, holding onto an upright periwinkle flower stem as he held out his right hand to

help Anne up through the overhanging creeper onto the solid edge. Slowly, he pulled her up through the creeping stems and big green leaves until she got her knees onto solid ground and scrambled to her feet. For a moment, she lost balance. He caught hold of her arms. Their faces were very close.

"I'm sorry, she said, in a strangely emphatic way.

"What for?"

"What you did back there was just about the bravest thing I've ever seen."

"No, I've worked with insects all my life, that one was just a little bigger—"

"I didn't mean that. When you refused to leave Stanley behind—and then you were going to shoot Khomich..."

"It wasn't going to come to that."

"I have to tell you this. We were going to abandon you and the soldiers. I didn't want George to be arrested. We were going to leave you without the radio once we were over the top."

"Whose idea was that?"

"Stanley's."

He snorted. "And I was facing up to Khomich for the young creep! What made you change your mind?"

"I suddenly realized—when Khomich wanted to leave Stanley behind—I was becoming as mad as everybody else connected with this loathsome place."

"If you hate it so much, why did you get involved with it?"

"You know George. He's a megalomaniac and a bully. He made me come. I was scared to death every single minute, but he didn't care."

"You sound as if you hate him."

"Do I?" She looked genuinely puzzled. Seeing Carr's brown face looking up at them through the creeper, he took her arm and started up the slope again. Ahead, he saw Robinson and Khomich. He kept his voice down.

"Who else knows about this place among the senior staff at Geneva?"

"I don't think there's anybody. George said nobody would take the project seriously until he could produce concrete evidence that it was viable."

"How was he going to do that?"

"He has a film about SRP they're going to show at the Supreme Council next week—only he was going to substitute a film about this place without telling Towne. He says Towne is so obsessed with holding

onto power he'll do anything to discredit him."

"A megalomaniac bully and a paranoid old murderer—not a lot to choose between them."

"What are you going to do to George?"

"I'm going to save his damned life because it's the only way I can see of saving my own."

Five minutes later, they were coming around a huge ribwort weed, its seeded stalks towering far above their heads, when they saw the tip of a big gray boulder beyond a clump of heather. By now, they were high enough to feel a slight breeze. The sky was darkening. They decided to erect the tent in a sheltered space between the rock and the heather. Cautiously, they probed the shadows with their prods, and then began to open out the dark green nylon of the tent, noticing a sweet, musty smell but failing to spot its source a few feet above their heads on the heather, a pale green creature with two huge, exquisitely tailed wings. That was when it began, the night of the moonmoths.

Chapter 17

The female luna moth was ready to take a mate. For this purpose, nature had given her equipment so complicated and sophisticated it was not fully understood by scientists. Every two seconds, there was a pulsing protrusion of green segments at the rear of her furry body. She was sending out two forms of the same signal, one a series of electromagnetic waves with an infrared element for distance, the other a stream of scent molecules that were wafted off into the dusk by a faint breeze. The message was simple—a virgin female had reached her time. In heather plants and bushes all the way along the downwind breeze, the message was being received by the fern-shaped antennae of moonmoth males. To them, it was not simply a message or an invitation, but a command they were programmed to obey instantly, the sole reason for their existence, a command that could stretch out through the darkening sky for mile after mile...

By then, they were feeling the cold. They pulled themselves into their sleeping bags and lay together in impersonal, quilted intimacy. From the dusk sky above came the needle-fine screams of bats.

“Paradise,” Carr said ironically. “I just don’t understand it.”

“Don’t understand what?” said Lena. “People like you—educated, been to universities, scientists and all that—you’re off your rockers thinking you could live down here.”

“You could catch worms for us,” Lena said.

“I’m not going to be here, though, am I?”

In strong contrast to her normal prickly aggression when dealing with groups of people, Lena had a way of picking out one individual and making him feel they had been intimate friends all of their lives. Through her sleeping bag she gave Carr a kick. “Listen, you overmuscled bonehead,” she growled, her voice hoarse with a somewhat violent note of affection, “*Homo sapiens* started as a hunter and then became a farmer—we can farm and hunt from the start. George says this place is an orchard and a granary and a happy hunting ground combined.”

“Granary?” Robinson sneered. “Who’s going to drive the tractors to

plough the wheatfields?”

“We won’t have to *plough*. A few square yards of wild corn would give us enough grain for a whole year! We could dig a hole for one seed potato and feed hundreds of people. We could trap blackbirds and thrushes in nets—they used to be considered a royal delicacy, didn’t they? You could be the number one hunter, Roy. You’d be good at trapping giant birds.”

Yeah,” said Carr enthusiastically, “we could use worms as bait. stake ‘em out, make snares with wire—”

“Do shut up, Carr,” Robinson snapped.

“What about rabbits and guinea pigs? They’re good eating—we could sink traps and—”

“Carr! If you won’t shut up, you’ll go outside on watch!”

“No, thank you.”

“You’ll do what I tell you, Carr. Go outside!”

“Not bloody likely.”

“I’ll put you on a charge!”

Carr made a growling noise. “You—put me on a charge? Just wait till our Area OC hears about this caper. You told him a lot of lies. He hates green uniforms, he’ll—”

“Go outside—THAT’S AN ORDER!”

“Drop dead.”

“Why don’t you take the first watch, Hugh?” Lena said maliciously, “aren’t officers supposed to set an example? Not scared of the dark, are you?”

“Keep out of this, you meddling bitch! Carr—when we get back, I’ll have you in front of a Disciplinary Board so fast your feet won’t touch the ground! That’s a promise.”

“Tell me the old, old story,” Bruce drawled, “show the human race paradise and within two minutes we’re at each other’s throats. Tell your boys to stop squabbling, Khomich, they may waken the neighbors.”

Khomich merely grunted.

“Paradise—an old Hebrew word, *pardress*, a citrus orchard,” Magruder said reflectively. “That’s what this could be, an orchard as big as outer space. Look, we’ve hardly put our feet down on this planet, so who’s to say there’s only one environment that can sustain us? Is this any crazier than outer space—yet we’re spending trillions on reaching the galaxies?”

“Paradise?” Khomich grunted. “Flies as big as birds? Beetles as big as wolves? Birds as big as houses? Scaly monsters that rise up out of the

dirt to tear you in pieces? *Plants that eat flesh? Paradise?*”

“If that had happened with a lion or crocodile, would you have said that people couldn’t live in Africa? George is right—”

“No, he is not right,” Anne said firmly, “he’s my husband, so I suppose I’m being disloyal, but it’s my honest belief that George has become totally irrational over this project.”

“Very disloyal,” snapped Lena, “if he was my husband—”

“Which he isn’t, although you’d make a good pair.”

“Of all the sounds the human voice makes, the least attractive is that of women snapping at each other,” Bruce drawled.

“Is that why you never married?” Lena sneered.

“On the contrary, I was married. My wife killed herself because the WFC Population Department classed her as ineligible for motherhood. In case you think that’s a sob story, I have to say they were right—my wife was a schizophrenic. Mind you, that wasn’t their reason—they said she was too old at thirty-two.”

“Weren’t you happily married?” asked Anne.

“Let me tell you about the love life of the ceratoid anglerfish. It lives deep down in the ocean where it’s very dark. It doesn’t often meet another ceratoid anglerfish, but when it does, the male sinks his pincer teeth into the female’s side and never, ever lets go. You may think that sounds more like female behavior in our species, but, however gradually, the male’s body fuses into the female’s body. Their blood systems unite. The male gets fed through the female. Then a strange thing happens—his testes begin to grow at an alarming rate—”

“His what?” Carr demanded.

“His *balls*! In fact they grow so big he has no room for anything else—all his other organs just wither away. Even his eyes become mere relics. His whole body is just one big pair of balls! This isn’t nature necessarily punishing the male—it’s a precaution in case that female never bumps into another eligible male down there in the deep dark ocean. For the rest of her life she has sperm on tap. If they didn’t behave like that, the species would die out.”

“Let’s hope it doesn’t become fashionable,” said Magruder.

“Then again, there’s the praying mantis,” Bruce went on, talking to prevent more arguments. “During copulation, the female often feels peckish and starts nibbling at her husband, in fact, she’ll eat his head off during the very moment of ecstasy.”

“Are you trying to tell us marriage is one-sided?” Lena said ironically.

“Not at all—without his head, the male mantis doesn’t lose interest

halfway through. His nervous system goes on working—the female gets *all* his sperm. The moral is—nature isn't in the business of putting the magic into marriage, nature is in the business of reproduction. Now, consider the *Empipididae*, one of the robberflies. They mate on the wing and the female will eat the male—unless he brings her a gift. What he does is catch a midge and wrap it in his own silk secretion. While she's eating it, he—”

Something crashed into the tent, immediately flattening it across their bodies and faces.

Paralyzed by shock, for a long, terrible moment they could not move a muscle, not even to scream.

Out of the purple dusk they zoomed one after another, the big male moonmoths, drawn from as far away as two and three miles by the imperative command carried on the breeze.

It was a race—with only one prize. Guided by scent, homing toward the mysterious infrared beam by their fern-shaped antennae, the males fluttered down onto the low clump of heather, jostling each other, folding back their long-tailed, lime-green wings as they crowded toward the pulsing body of the virgin female whose night it was. Five, ten, then twenty—and still the big wings fluttered down toward the source of the scent.

Within seconds the prize had been claimed. The first male to reach her was already linking his body with hers. But it was a strange race—for the big males had never seen the prize before, did not recognize the prize when they saw it, failed to realize that they had lost. The scent was all that they responded to—and the scent by then was everywhere, especially on the little tent pitched just below the heather sprig from which the virgin female and the winner of the race now hung in ecstasy...

Somebody screamed and then they started to fight for air, ripping at the zip-fasteners of their sleeping bags, twisting and contorting their faces to escape suffocation, driven to terror and hysteria by a claustrophobic nightmare beyond the scope of human imagination. They tore at the heavy, inflated nylon with their bare hands—until Magruder managed to push off the bulky creature pressing urgently down on his prostrate body and dragged his knife from its sheath.

He slashed at the tent. By now it was being pushed and pulled, this way and that, not just by one huge Creature, but by what seemed like a whole herd of soft, bulky bodies. The knife ripped through nylon. The tent deflated with a vast sigh. Magruder went on slashing with the knife. Somebody fired his pistol. An awful scent flooded down on them, the same sweet, musty scent they had vaguely noticed while pitching the tent.

Magruder pushed his head and shoulders into the open air.

In the half-light of dusk he found himself surrounded by furry monsters from a dream. He struggled to his feet, swinging the knife at thin legs and brittle membrane. The others fought their way out of the widening rip in the collapsed tent.



In the half-light of dusk he found
himself surrounded by furry monsters from a dream

For a few moments, it felt as if they were fighting off a flock of mohair sweaters. They kicked and pushed at furry bodies. Robinson came up with his torch. In its beam, they saw a compound eye. He swung the torch around. The big shapes were all round them, like huge-

eyed sheep. One of them bumped into Carr. He shoved it away with a curse. Where his hands touched the folded wings, they saw a cascade of scales, looking like opaque playing cards, pinks and greens.

"Give me the torch," Bruce said.

"What the hell are they?"

"Moths, of course." He swung the beam up toward the clump of heather under which their tent had been pitched. The mating pair were still locked together, the male hanging, head down, below the female. Bruce started to laugh. "Don't touch their wings," he said, "if you knock the scales off, they'll be damaged."

"But why should all these moths come crushing in on us?" Magruder asked plaintively, trying to dodge the big, cumbersome bodies still banging about at their waists.

Bruce swung the beam onto the flattened wreckage. Six or seven big moths were crawling over it, the fuselages of their furry bodies moving jerkily, their foldedback wings looking like the cloaks of comic-book spacemen.

"Are they—dangerous?" Anne Richards asked nervously.

"No, just a bit clumsy."

"But why are they so attracted to the tent?"

"You're not going to believe this. They've come all this way to mate with that female up there, but they don't know what a female looks like. Her scent must be all over the tent. They'll try to mate with anything her scent is on. You know what we've just been through? An attempt at mass-rape—by moonmoths!"

"That's—incredible. "

"It is only the kind of madness I expect in this place of monsters," said Khomich.

Through the rustling of the seething moths, they heard another sound. The soft hooting of an owl...

They huddled together against the warmth soaked up by the big stone during the long hours of sunshine. A few yards away, the big moths were still floundering over the ruined tent, still searching for the prize. Out in the terrifying infinity of the night, they saw hazy pinpoints of yellowish light, fireflies signaling to each other in the relentless merry-go-round of courtship and mating. Sometimes the owl's hooting seemed to be just overhead and then it would come from a distant part of the garden. They took turns staying awake on guard as exhaustion began to

overcome fear and shock. Bruce sat with his back against the rock, sleeping bag pulled up to his chest, his arms free to use the pistol which lay in his lap.

"Nobody will believe us," Anne whispered.

"I don't think it's classed as adultery—with a moth," he murmured.

"Oh God, I'm cold."

"Put your head under my arm—that better?"

"Better than cuddling a moth!"

He flicked the torch beam across their huddled bodies. Nobody moved. "They're all sleeping," he hissed. Lena Davidson eased herself away from Khomich's broad back. She put her lips close to Magruder's ear.

"We're going now. Hold them back as much as possible. Tell them to leave you at the Safety Station. Once we've got George back to the house, we'll pick you up."

"Good luck."

She moved cautiously, slipping off her sleeping bag, rising to her knees. Somebody was snoring.

They tip-toed past the black silhouette of the rock and then started up the hill, stopping every few steps to listen for sounds of danger...

Robinson awoke feeling numb. He lifted his head. The sky to the east was a reddish-blue. Pins and needles flooded through his cramped legs. He wrinkled his nose in distaste as he looked down at Khomich's fair hair sticking out of his sleeping bag. Sleeping next to Khomich? He wondered what his wife and little girl would be doing—probably still buried under warm blankets. He had never liked the high-rise SD barrack-block in Knightsbridge, not as a place to bring up a little girl, but now it seemed like the warmest, cosiest place on earth. He rubbed his hands together, shivering, his mouth dry and foul-tasting.

"Carr?" he said, blinking away the fuzz in his eyes. Must have gone around the other side of the rock for a leak, he decided. Not a bad chap—couldn't really blame him for getting a bit needled when he found himself on a Crazy assignment like this. He would tell him to forget all that business about a Disciplinary Board.

"Carr?"

Khomich grunted. Robinson stood up quickly, for some reason expecting Khomich to throw his arms around him. Khomich's face

appeared, blinking sleepily.

“Carr was on watch, sir. CARR!”

Khomich came alive suddenly, unzipping his sleeping bag with one quick movement and jumping to his feet.

“Where’s Lena?” Magruder said, yawning. They all looked at where she had been lying between Khomich and Anne Richards. Anne rubbed her hair. “Her pack isn’t here,” she said, reluctant to unzip her bag.

“Carr’s pack isn’t here, either.” Robinson frowned.

Bruce stood up quickly. They drew their pistols and moved cautiously to the end of the rock. There was no sight or sound of Carr or Lena. A red glow was spreading across the sky.

“The bitch!” Magruder clenched his fists. “She’s taken Carr with her!”

“But I told you—we weren’t going to abandon them,” Anne Richards said accusingly.

“What are you talking about?” Khomich demanded.

“They were going to split and leave us while they got to George Richards first,” Bruce explained. “Anne told me about it—”

“And you didn’t tell me?”

“Anne said they’d changed their minds.”

“That’s true,” Anne said. Magruder nodded earnestly. “It was just a crazy idea we had—to help George get out of the garden before you could collar him. Lena agreed—at least she said she did. I’m sorry, I didn’t realize she was such a fanatic—”

“But why did Carr go with her?” Robinson demanded.

Khomich turned on him. “Because you threatened him with a Disciplinary Board, I would say. As an officer, you should have known better than to threaten a man—either you punish him immediately, or —”

“You were going to shoot him, remember?” Robinson snapped.

“Shut up, both of you!” Bruce quickly rolled up his sleeping bag and shoved it into his pack. “My guess is she’s promised that George Richards will protect him—if they can get Richards out of the garden before we catch up with them.”

They pulled on their packs. Magruder took a few steps, then winced and clasped his leg. “I’m sorry—it’s agony...” Bruce turned to Anne.

“Is there anything seriously wrong with it that he can’t walk?”

“I don’t think so,” Anne said, “nothing I can see—”

Bruce turned on Magruder. “It’s up to you, Stanley, you either keep up with us, or you stay here.”

“But I could be attacked by anything!”

"I don't think you understand, son. We're now in a race to reach Richards, if we don't win, I'd say we're dead. Tell you the truth, I don't really give a goddamn what happens to you."

Magruder made little grunts and hisses, screwing up his face with agony—but he managed to keep up.

On their way to the top in the gray dawn light, they had to skirt the body of the hooded crow. They saw congealed blood on various parts of its black and gray feathers. Even in death, it dwarfed them; although the head and strong beak lay inert, they had an eerie feeling that it was only feigning. Big blowflies were already walking over the open gunshot wounds, their black bodies glinting with greenish tints. They caught a whiff of the ammonia secreted by the flies and hurried on, consciously averting their eyes from the shadows under the lifeless feathers, where they sensed rather than saw a grim scurrying of industrious scavengers. For the first time in his life, Robinson came to know why human beings placed such importance on strong coffins to guard their eternal rest.

Khomich got to the top first. He threw out his rope, winding it around his waist to take the weight of Anne Richards. Robinson climbed without help. As he took a grip of the rope, he said, quietly, "Next time, *I'm* going to put a bullet in Carr."

"Next time, he will be trying to put a bullet in us, Captain."

It was warm inside the large dome of the Safety Station. When the noise of smashing ceased and Lena came down the metal stairs from the observation gallery, Carr seemed reluctant to leave.

"You know what'll happen to you if they catch up with us," she said sternly. Then she smiled and patted his cheek. "Don't worry, Roy, George will be extremely grateful for what you're doing. And so will I."

Carr grimaced. "You sure we'll be all right—only two of us?"

"We'll travel faster without that stupid cow Anne to hold us up."

"If we went back now—"

"You know Khomich. He was going to shoot you—for nothing. And that drip Robinson—he hates your guts because you're twice the man he is. They won't be happy until you're doing hard labor in a permafrost camp. Come on—Lena will take care of you." She reached up and kissed

him on the lips. Carr took a deep breath. "Okay," he said, "let's get a move on. Got the spare transceiver?"

"Yes—you better carry this wire-saw, we'll use it to cut through the bridge at Crossing Two. They'll never catch up with us."

A short way down the slope she saw a small earthworm sliding across a patch of dew-covered cooch-grass.

"Give me the wire-saw," she said.

He watched incredulously as she ripped the wildly-threshing worm to bloody pieces with the deadly wire of the gas-powered saw.

"What are you doing that for?"

Scatter the bits down that gully—use your prod.

Don't get blood on your boots, or you'll leave a scent." She smiled, giving him another pat on the cheek. "It's a delaying tactic, Roy. The smell will attract every predator on the rockery. By the time they arrive, this whole area will be a death-trap."

He began to wonder if he wouldn't have been safer with Khomich. But it was too late to turn back.

The Safety Station was a gray alloy dome with a glass roof, standing on massive titanium stilts. By then, they had stopped trying to measure things by normal perspectives; it looked as big and solid as any lunar base—and as safe. Magruder led them under the stilts, still limping heavily.

"The idea was to design something that no insect could penetrate, he said, using his prod to reach up and push at a red plate set flush in the huge under-floor. With a whirring noise, a set of aluminum steps came down from between two flaps. They waited, pistols drawn. Nobody appeared in the hatchway. Khomich climbed the steps. His boots disappeared. Robinson followed him. The others waited, shivering in a cold draught.

Robinson's face appeared in the hatchway. "Nobody here."

They climbed up and found themselves in a large, bare auditorium with a glass roof, the sides honeycombed with partitions for half-constructed rooms. The air was beautifully warm. Using his prod as a walking-stick, Magruder limped into the middle of the big floor space.

"In time, this place was meant to have a permanent base staff of about a hundred people," he said. "It's solar-heated—we can all have a hot shower. You'll find spare clothes and—"

"Where is the communications room?" Khomich demanded.

Magruder used his stick to point up at a gallery running round the inward-curved walls. "See where all those cables are—that's the console. There's a videolink with base station and a radio."

Robinson ran up a flight of steep metal stairs. A few minutes later, he leaned over the rail. "They've been here," he called down. "They've smashed everything."

Magruder closed his eyes and shook his head. "Honestly, I've always known Lena was pretty fanatical about the Project, but I never realized she'd go this far." He looked at Anne, sighing apologetically. "I guess there's nothing she won't do for George."

Before Anne could say anything, Bruce pulled off his pack and took hold of Magruder's arm. "Okay, Stanley, show us where to have a quick wash and get some new clothes—didn't they say there was a stock of food here?"

Bruce and Khomich came out of the shower-room together. In the kitchen, they found Magruder serving out cups of hot broth. "Freeze-dried vegetables and hunks of real chicken," he said proudly, "after that—just smell some aphid honeydew!"

Khomich tried the broth and nodded appreciatively. He emptied his cup and then opened a jar of honey, dipping in his middle finger. "Very good."

"Great for energy," said Magruder cheerfully. He winced with pain as he turned to give Anne more soup.

"There are three things we can do," Khomich said, licking honey off his finger. "We can stay and let them come for us." Magruder nodded. "However," Khomich went on, "if that woman and Carr get Richards out of the garden, he might decide not to come for us."

"No, I don't think he'd leave us," Magruder said, "even if he is down on you people, there's still me." He smiled guiltily. "I'm supposed to be on his side."

"I think we should try to catch up with them," said Bruce. "We can leave Stanley."

"What do you think we should do, Stanley?" Khomich said.

"Well, if you're set on catching up with them, I guess you'll have to leave me."

"Why is that?"

Magruder frowned. "This goddamn leg, of course. I'd never make it down the rockery and across the stream."

Khomich nodded. He dipped his finger into the honey and licked it noisily. With his right hand he pulled his pistol out of his waistband and

calmly placed the nozzle against Magruder's temple.

"What are you doing that for?" Magruder asked, sounding innocently astonished, eyes flicking nervously from the pistol to Khomich's face.

"Take off your boots, Stanley," said Khomich.

"Why? Oh hell—come on—" he laughed nervously. Khomich wiped his finger on Magruder's chest.

"Take off your boots."

Magruder looked appealingly at Bruce. "What's he playing at?"

"Maybe he thinks you're dirty."

"Are you guys serious?" Magruder was frightened now

"Yes," said Khomich. "I will count to three—are you going to take off your boots?"

"But—"

"One—"

"Just tell me why, for God's sake!"

"I want to find out if your leg is really injured. Two—"

"Okay, okay." Magruder bent down cautiously, eyes still on the pistol.

"And your socks," said Khomich.

"So what happens now?" Magruder said, standing in his bare feet. Khomich handed him the jar of honey.

"Rub that on your feet."

"Are you crazy? What good is honey for a bad leg?"

"We will see. Rub it on your feet and then we'll let you go down the ladder."

"Go outside? With bare feet—covered in honey?" Magruder's voice was squeaky with terror.

"You're frightened the smell will attract some of your insect friends?"

"You know damn well it will!"

"Then we will see how bad your leg really is." Khomich shoved the jar at Magruder. The young American looked beseechingly at Anne. "I'll be torn to pieces!"

"You were going to leave them to die, Stanley," she said calmly.

Magruder's head dropped. His voice was almost inaudible. "Okay, okay, so my leg's all right. I just didn't want to go with you people."

"Second question," said Khomich. "Is there another radio?"

"Yeah—but Lena's taken it."

"Why?"

"She can call base-station on another channel. They can speak direct to the Recovery Vehicle without your soldiers hearing anything up in the Control Room."

"So you knew they were going to leave us?"

"Yeah, I guess so."

"Why did you stay behind?"

"To hold you back as long as possible."

"Then what?"

Magruder shrugged. Khomich raised the pistol again. "If you don't tell us the truth, I will put you down that ladder with no clothes on at all—except a skin of honey."

"All right—I was to stay here, they would get George out of the capsule, the Recovery Arm would pick them up, George would be back to full-size before your soldiers up in the house knew anything. Then they'd pick me up—and you would all be lost somewhere in the garden. It was Lena's idea!"

"Was it her idea to lose me as well?" Anne asked.

"I was against that, Anne—honest! But she said you'd changed sides —"

"I'd be out of the way and she'd have her great hero George Richards all to herself? They are having an affair, aren't they?"

Magruder sighed. "Yes. I'm sorry, Anne."

Khomich looked knowingly at Bruce. "You said I was too cynical about people, Professor."

"I've been out of touch with the human race. I thought people were despicable—I see now I was flattering them. We'd better be on our way."

"What are you going to do to me?" Magruder asked, his voice shaky and his eyes apprehensive.

"We're going to take great care of you, Stanley," Bruce said briskly. "You're coming with us—until we get hold of George Richards, you're the best insurance policy we've got. They wouldn't let you die, would they?"

"Don't count on it," said the young American dejectedly.

A few minutes later, they were climbing down the ladder. Bruce felt confident. Invigorated by a hot shower and warm food, he was ready to meet any challenge—especially now that he could regard Khomich as an ally. In place of the sadist they called "The Butcher," there was a brave man who had conquered his own terror of the garden's creatures. His calm professionalism in forcing the truth out of Magruder had revealed his true strengths—an iron will coupled with a subtle comprehension of human character. Khomich was the man you would want at your side in the jungle.

“Would you actually have put Stanley outside in his bare feet?” Anne dared to ask Khomich.

“And waste good honey?” He shook his head. As she began to smile with relief, he added, “No, I would have shot him through the neck.

“What’s all that commotion down there?” said Robinson. They stopped. Their route lay down a narrow gully of bare earth between some big stones and an impenetrable forest of heather. In the gully, four or five starlings were pecking at something on the ground.

“Starlings always look to me like robber barons, the aggressive way they strut about,” said Anne.

As they climbed down the humming and buzzing sounds grew louder.

“We’ll waste too much time making a detour,” said Bruce. He looked down at the glinting black and green feathers of the sleekly rapacious birds. “Throw stones at them.”

“This will be quicker,” Khomich raised his pistol, aiming just above the starlings. The bullet hit the rock and exploded in a spray of mercury. The birds bolted off into the air.

They hurried down into the gully. Houseflies rose in buzzing swarms. “They’re harmless enough,” Robinson said.

“On the contrary,” said Anne. “As a doctor, I can tell you they’re probably the biggest menace of all to man. Do you know they each carry about two million bacteria? Cholera, typhoid, dysentery—”

“Let’s not hang around to let them land on us,” Bruce snapped. “What the hell are they eating anyway?”

They came down a steep incline of hard, gritty earth, digging in their heels, reaching up for holds in the rough surface of the stones.

“Looks like bits of meat,” Robinson said. He was in the lead. He stopped where the rock’s overhang formed a shadowy cave. He was holding out his hand to help Anne when, through the buzzing, he heard a creaking noise, like sheets of metal rubbing against each other. He held up his hand.

“Hold it a minute,” he said urgently. “I think there’s something in this —”

They heard a sharp hissing noise and then it hit them, a stench of vinegary acid that brought tears to their eyes.

Out from its daytime lair under the rock came the whiptail scorpion, an armor-plated monster twice the size of themselves, its low-slung body a dirty brown color—like an army tank with huge claws.

They scabbled back up the slope of loose grit, grabbing desperately at each other as their boots slipped—all except Robinson. He was clutching his face and screaming, blinded by a spray of mist from the glands at the base of the erect, whiplash tail.

“I can’t see! I can’t see!” he was yelling.

Khomich stared in horror—then started jumping down the slope, trying to fire his pistol even as he was losing his balance.

The whiptail scorpion moved so smoothly it did not look particularly fast—but before Khomich could find a secure foothold, its low-slung tank of a body had sidled out of the shadows and grabbed Robinson in its ferocious claws.



A body had sidled out of the shadows
and grabbed Robinson in its ferocious claws.

Chapter 18

One moment, Robinson was careering about blindly—the next, he was being dragged out of sight into the darkness under the rock. His body looked broken—but he was still screaming.

Without hesitation, Khomich went down in a crouch and started into the low cave. Bruce caught hold of his jacket and pulled him back.

“It’ll blind you as well,” he said.

“I don’t care,” Khomich screamed, “it’ll kill him! Let me go!” He smashed his pistol down on Bruce’s arm. Bruce grabbed him round the legs, shouting at Magruder. “Why didn’t you tell us there were scorpions in the garden, you bastard?”

“I didn’t know,” Magruder shouted, scrambling down the incline. “Honest I didn’t.”

Khomich fought free again. Bruce made another dive at him. “Listen, man—he’s dead by now!”

Khomich hesitated.

The screaming had stopped.

Bruce pulled himself to his feet. He aimed his pistol into the darkness and started firing. Khomich went berserk. He rushed at Bruce, hitting out wildly. “You’ll kill Robinson, you madman!”

Bruce went on firing into the dark cave. “If he isn’t dead already, killing him is the best favor we can do him.”

“I’m going in there—if you try to stop me, I’ll shoot you!”

“Khomich—those claws could crush metal. You know what that thing does? It crushes the life out of its prey. It has mandibles like guillotines—they slash the flesh to shreds. Then it spews out its digestive juices and turns the flesh into soup. If Robinson’s still alive, God help him—but he won’t be. And if that thing’s still alive, it’ll spray acetic acid in your face and you’ll be blind for life.”

Khomich’s face contorted in horror. He turned toward the dark cave and started firing into it, screaming unintelligible curses.

Bruce got out his torch. “We must have killed it by now—I’ll go in.” Khomich tried to push ahead of him. Bruce caught him firmly by the elbow. “You stay here, Khomich,” he said gently.

Bruce disappeared. Khomich let his head fall back, his whole body

shaking with sobs, his eyes streaming with tears. Anne and Magruder could only watch him—awestruck by the ferocity of his grief. Then Anne put out a tentative hand to brush his arm. She started crying as well. “It couldn’t have lasted for more than a few—oh God.”

Bruce backed slowly out of the darkness. He straightened up. His face was like a mask of white stone. Khomich was standing with his head against Anne’s chest. Her arms were around him. Magruder was sitting down, his head between his knees, making retching sounds.

“He couldn’t have known what happened to him,” Bruce said. His voice was distant and remote. Khomich threw back his head, his jaw hanging limply, his eyes closed. From his open mouth came a long, low, endless moan.

Slowly, he regained control of himself. He turned away from them, facing the gnarled heather stems, drawing his hand over his face. Then his shoulders stiffened. He turned toward them, his face streaked with tear stains but harder than Bruce had ever seen it.

“Is the creature dead?”

Bruce nodded.

“And Captain Robinson?”

Bruce nodded again.

Khomich wiped his nose on the back of his hand. “We are wasting time,” he said.

They clambered down the rest of the gully in silence. Seeing something on the ground, Bruce stopped, pointing at a round piece of drying flesh. Magruder touched it with his boot.

“It’s a worm,” he said, frowning in puzzlement, “looks as if it’s been —”

Bruce put his finger to his lips, gesturing at Khomich’s back. They went on in silence, out of the little gully of earth into a waist-high patch of mosses and stones.

“That worm was cut up by something,” Magruder hissed.

“I know,” Bruce murmured, covering his mouth with his hand in case Khomich looked round. “And we know who cut it up—don’t we?”

“Lena? No—for God’s sake—”

“She cut it up and left it there to attract predators. It was to hold us up.”

“Honest, Bob—I never realized she could be as—”

“We’d better not tell Khomich—the way he feels, he’d probably blow your brains out.”

“But it had nothing to do with me! You know I wouldn’t have done

anything like that!”

“Why don’t you just keep quiet, Magruder?”

To avoid heavy dew on a patch of gray lichen, they made a detour across exposed stone. For the first time since they had entered the garden the sky was gray. Bruce felt uneasy. He had a sensation of being watched. He looked over his shoulder. He thought he saw a movement at the far side of the lichens. Then he heard a scratching noise. He heard the noise again, a rhythmic scratching—but this time he could also hear a creaking sound.

The others were too busy finding footholds on the wet stone to notice anything. He looked quickly over his shoulder. It was just coming onto the rock, red fangs and a banded yellow-brown body. Behind the fangs, he could see its dark jaws.

“Let’s hurry,” he said calmly. “I think it’s going to rain.”

It was a centipede, a big one, following them in daylight because it was excited to madness pitch by the smell of blood, the watery-blue blood of the scorpion and the dark red blood of Hugh Robinson. He had walked through it in the darkness of the whip-scorpion’s lair—now he was leaving a scent trail with every step he took.

If he told the others, Khomich would start shooting at it. But even a centipede as big as a boa constrictor was still a difficult target, fast-moving and low on the ground. At that angle, the armor-piercing bullets might easily skid off its hard segments. And one bite from those red fangs would shoot enough poison into the body to kill instantly.

He thought of taking off his boots—but his soles would be ripped to shreds by the hard rock. Besides, his own sweat would leave a trail so obvious it might as well be painted.

He took longer strides so that the scent marks would be wider spaced. It was slithering down the rock.

He took hold of Khomich’s elbow.

“If a centipede got one bite at you, that would be enough to kill you.”

“Professor, I will believe anything you tell me about these scaly monsters—but talk about something else. Magruder—where is this bridge?”

“Just beyond those ferns—”

“The trouble with a centipede is it makes a very difficult target,” Bruce said. “You might miss it half a dozen times. It’s an extremely violent creature; it wouldn’t run away—it would come at you like a length of living barbed wire.”

Khomich shuddered. “Why are you telling me these horrible things?”

Are you trying to torture me?"

"I'm telling you because there's one following us—and I don't want you to stop and try to get it with your pistol." His hand tightened on Khomich's elbow, forcing him to keep walking. Khomich looked over his shoulder. His eyes widened in horror. "Just say we have to start running."

Khomich swallowed. Then he nodded. Sprinting forward, he caught Anne's hand. "It's going to rain," he shouted. "Run for those bushes down there."

"Come on, Magruder," Bruce snapped, "Let's give that goddamn leg a work-out."

"I don't feel any rain—"

"Run, you bastard, *run!*"

The rocks were slippery with dew. They came onto soft earth which stuck to their boots. When he looked back, the centipede was snaking this way and that, its antennae probing for each signpost of blood-scent. Then it slithered forward in a straight line. Anne was gasping for breath.

"My leg is hurting now," Magruder gasped. He came to a stop, biting his lower lip. "I can't run any more."

This time he didn't seem to be lying. Bruce drew his pistol.

For a moment, he thought a bomb had dropped on them. Something exploded in the earth at his feet. A stinging spray of water and grit hit him full in the face. He wiped his eyes, finding himself looking down into a little crater. Then another bomb dropped in a shower of water and earth.

Water!

"It's raining!"

He stood there, laughing.

The centipede was on bare rock a few yards behind them. Magruder spotted it for the first time. He started to yell.

"Shut up, Stanley," Bruce said. "The rain will wash away our scent."

And then he did something strange, something alien to every principle he had ever tried to live by. With a look of savage exultation on his face he raised his pistol and fired back up the slope at the red fangs and the dark jaws.

The bullet missed—but the centipede was already slithering under a big stone, its bloodlust suddenly switched off as if by computer.

As they hurried across damp mosses and soggy layers of dead leaves,

he kept hearing an accusing voice inside of his head: *You were going to kill a living thing for fun!*

They reached the huge forest of ferns before the raindrops started bombarding the earth in earnest. Rain—once an ordinary, commonplace thing in the life of mankind... taken for granted until the day man realized too late that his crimes against the planet had contained the seeds of his own cataclysmic punishment. Rain—an everyday miracle which scientists could explain, but not produce. Rain—not simply a drizzle or a sheet of water, but individual drops hurtling and spinning toward the earth like meteors.

Meta the garden spider had a bluebottle caught in her orb-web. She was circling it carefully, preparing to inject her venom. One raindrop battered into the silken web. The fine strands vibrated like violin strings. Another drop hit a main hawser. Meta scuttled for shelter as the web was bombed to ruins. But the bluebottle did not escape—nature has no taste for zero-hour sentimentalism. The ragged silk was battered to the ground, where the trapped fly slowly drowned...

The honeybee was on a dandelion when a drop hit her transparent wing. She tried to fly but a vein was broken. Another drop shattered on her golden fur. Gradually, she lost her footing and was knocked off the flower as surely as if she were being stoned to death—falling into a muddy puddle already beginning to trap the little flies...

The white petals of the wild rose might have lasted for another two or three days—the bombardment ripped them off the crown. In crevices and holes the creatures of the garden took shelter—but not all were quick enough. A hairstreak butterfly tried to ride out the storm on a thick branch, its metallic brown wings closed tight. Then came an unlucky run of six or seven big drops hitting it successively—until it keeled over and slid over the edge of the branch.

Rain was devastation and death—yet down there in their hidden underworld, they saw the beauty of a little rainbow. They saw the huge fern fronds turning to a green more lustrous than any color their eyes had ever coped with, a radiant, *living* green.

As the little puddles turned into pools and the water level rose, they started through the forest, careful not to grab hold of fern leaves which could slice through flesh as easily as thin wire. Sheltered from the rain bombardment, they still found themselves soaking wet as water ran down every stalk and stem. All around they heard rippings and

gurglings as trapped air bubbled out of the saturated earth. They helped each other across huge brown colms, testing each cranny and foothold with their prods. After a while, the noise of water became deafening. Magruder signaled at them to fit in their communicator earplugs.

“We’re coming to the stream. Once we’re out in the open, we’ll know which way Crossing Two is.”

Khomich nodded. In their earplugs, they heard another voice.

“Sorry, there isn’t any Crossing Two now. I’m afraid you’re stuck over there. Don’t get your feet wet.”

It was Lena Davidson.

Chapter 19

Khomich gestured urgently for them to say nothing. He pointed to Bruce's earplug. Bruce took it out.

"Speak to her," he said to Bruce. "Say nothing about Captain Robinson. Be friendly—say we're heading back to Station Two. Then ask her if the capsule is still signaling. Yes?"

Bruce nodded.

"Doctor Davidson, I presume. Bob Bruce here—why did you do a moonlight flit on us? We've missed you."

"Sorry about that, Bob." She laughed. Anne's face tightened. "I just couldn't see you and that policeman getting your hands on George. Is Anne listening? Don't worry, darling, I'll make sure your husband is safe."

Anne made to switch on her communicator. Khomich put his hand on her mouth.

"The capsule's still emitting?" Bruce said.

"Oh yes—still in the same place. We're just heading that way now. Roy and I."

"You're wrong about us, Lena. Still, as long as George will be safe with you, I think we'll head back to Station Two."

"Good idea—have a hot shower and a nice freeze-dried dinner. Roy and I will handle everything. Over and Out."

"Well?" Bruce said.

"We find another way over the stream, of course," Khomich snapped.

"Good," said Anne, "wait until I get my hands on that cold-blooded bitch!"

The rain had stopped by the time they came out of the ferns. Immediately, they were unable to hear anything for the rushing roar of the stream, which to them looked as big and dangerous as the Amazon. Khomich got out his map. Magruder pointed to where they were. They followed an old cinder path which ran parallel to the stream, moving east. They came to a huge concrete pillar. Magruder pointed to the map, his finger underlining the words GARDEN REFUSE, directly opposite Section Twenty-Seven on the grid reference. They walked cautiously to the edge of the path and stared open-mouthed at the foamy brown

torrent. How could they hope to cross that turmoil of water? Even Khomich seemed to acknowledge defeat. He pointed to Crossing One on the map. It would take them half a day to reach it. He pointed to BASE STATION. Bruce nodded slowly. Anne shook her head. Her lips formed the word several times before they understood. Raft—she was mouthing at them to find a raft! Khomich shook his head, pointing to the thunderous river. She gestured with both hands. If they got on a raft, the sweep of the water would take them to the other bank where the stream curved toward the pond. Then they would be within striking distance of Section Twenty-Seven—through an area marked in red letters on the map as NETTLES.

Khomich looked questioningly at Bruce. Magruder's eyes widened apprehensively. He gestured at the stream. How could they even think of setting out on an avalanche of water like that?

Khomich's mouth tightened. He nodded to Anne. They crossed the path, passing the vast concrete gatepost. Here, the ground was covered by a wet layer of black ash-dust from old bonfires. They saw rows of broken earthenware pots—and a rake still propped against a fence. Bruce saw an old seedbox. They dragged it clear of grass growing up between the slats. Big earthworms slithered among the yellow leaves and white roots. A yellow wireworm scurried for a hole, a family of woodlice took for cover like a fleet of dodge-'em cars suddenly given a chance to escape the arena. Even here, the roar of water made their voices inaudible, but Bruce cupped his hand around Khomich's ear.

"We'll put it in upside down—we can stand on the slats," he shouted. Khomich nodded. They dragged it back past the concrete post and across the cinder path. Khomich took off his pack and rummaged for his coil of nylon rope. He threw one end over the side wall of the box and then climbed between the slats, dragging down the rope to knot the two ends. He gestured at them to give him all the ropes, which he tied together, forming a line to tether the box while they were putting it into the water. Thin as the wooden slats were, so old they were covered by orange mold, it took them ten minutes to maneuver it into the air and then bring it down bottom uppermost. By the time they got it to the water's edge, their arms were leaden. Khomich looped the rope twice around his waist and dug in his heels. He nodded. They put their backs against the wall of rotting wood and slowly pushed it over the edge. Khomich braced himself. The rope tightened. They all grabbed hold of it—but the weight of water was immense. It dragged them at a run toward the edge, with Khomich trying to unwind the rope from his

waist. In desperation, he let himself fall to the ground. He was jerked round as if on a spit—and then the rope trailed quickly into the water.

It didn't matter—the box had sunk without trace. Again they exchanged dejected looks—although Magruder was obviously relieved. Then Anne gestured at them to go back to the refuse dump, nodding violently to tell them she had another idea. They followed reluctantly. Again they ploughed through the fine mud of black bonfire ash. She took them past the neat square of bare earth and white roots where the seedbox had been.

At first, they couldn't see what she was trying to show them among the dandelions and small thistles growing around an old milk bottle. Then Bruce realized she meant the bottle.

"What good is that?" he shouted in her ear. "We'd slip off it—there's nothing to hold on to."

"We won't be on it—we'll be in it! With our weight, it will float upright!"

In it? She was mad.

She shouted into Khomich's ear. He frowned—and then he crouched down and stuck his head and shoulders into the bottle. Its floor was littered with the dead husks of flies, its side still coated with a dry white skin. He stood up and nodded vigorously.

"You can't be serious," Magruder howled into Bruce's ear. "It'll sink and we'll sink with it. I'm not going in that thing."

Bruce wagged his finger at him. They got behind the bottle and began to roll it out of the weeds. It moved easily once they had it started. Magruder refused to help. They rolled it farther along the path until they found a small inlet where the water eddied gently out of the main stream. They turned it and then let it slide down as far as an exposed root. When he saw that they were going through with it, Magruder turned away quickly, intending to run for the first hiding place he could find.

Khomich got to him as he reached the concrete post, bringing him down with a diving tackle, grabbing the pistol out of his belt before he could reach for it. He made Magruder walk back to the bottle. The young American went down on his knees, imploring them not to make him climb down into the bottle. Khomich put the pistol against his head and held up one finger, mouthing the word *One*.

Magruder hid his face in his hands. Khomich tapped him on the head. He held up two fingers. He let Magruder see his trigger-finger moving back.

Magruder got to his feet. They stood around the neck of the bottle. He held on to the rim and lifted himself in, feet-first. Then he slid down out of sight. Anne took off her pack and let it slide down to join him. Then she climbed in. Khomich gestured to Bruce to go next.

Once Bruce was in the bottle, Khomich threw in his own pack and then grabbed the rim with both hands. Slowly, he managed to turn the huge glass cylinder until the base was free of the root. As soon as it began to slide, he vaulted in and slithered down the wall of glass on his back. The bottle slipped gently into the water. They were thrown together in a heap. When they picked themselves up they were staring at a swirling murkiness—as if they had a window into the heart of a dust-storm whirlwind. Everything had gone quiet.

“It’s floating!” Anne’s face was triumphant. “I knew it would! Didn’t you ever float half-empty bottles off a beach and throw stones at them? We did—I remembered and—”

“How the hell do we get out?” Magruder moaned.

They were thrown together again as the bottle was suddenly caught in the vicious current. The bottle began to bob up and down. “Jesus Christ—I’m getting seasick!” Magruder whined.

Caught in the mainstream of boiling brown water, they could see nothing except a small circle of gray sky. They had no way of knowing that the stream was whipping the bottle into the middle current racing through the garden toward the pond...

It was in the bottle that Khomich made his decision. The death of Hugh Robinson was responsible, creating in him a sense of guilt and desolation. He wanted to tell the others—especially Bruce—but shame kept his mouth shut.

Something red flashed past the bottle. It seemed to have slowed down. The water became clearer. Again, there was a flash of red—and silver.

“It’s not moving so fast,” Bruce said. “We must be in a backwater.”

“Look!” Magruder shuddered, pointing at the glass wall.

“That’s a koi carp,” Anne said frowning. “But they’re in the pond.”

“Climb up and see where we are, Anne—you’re the lightest.”

Khomich stood in the middle of the bottle, feet apart, knees braced. Bruce climbed on to his shoulders, steadying himself by pushing against the opposite sides of the bottle. Magruder started to climb, standing on

Khomich's knee and then his shoulders. Khomich took big gulps of air. "Will you be all right?" Anne asked. He nodded grimly, his face going red, big veins pumping in his neck. She stepped onto his thigh and caught hold of Bruce's jacket, pulling herself up until they were face to face.

"I suppose if a girl dates you, she has to bring her own scaffolding."

"For God's sake, woman, get off my head, Khomich growled.

"Sorry." The bottle began to wobble. She scrambled onto Bruce's shoulders. Magruder's terrified face looked down at her. "Uh uh—that's my face you're dancing on," Bruce drawled from below.

"Sorry."

"Honest, Anne, I didn't intend for us to go through all this, it was simply a—"

"Shut up, Stanley."

She got a knee onto his shoulder. Bruce and Khomich had their arms extended tight against opposite sides of the bottle. Cautiously, she got her boots on to Stanley's shoulders and pushed her head up into the neck of the bottle. "It's no good—I can't reach the top." The bottle gave her voice a slight echo. "Just a minute—" She spat on her hand and rubbed at the dusty film of dried milk residue. She was above water-level. She put one eye close to the glass. "We're right in the middle of the pond."

"Which direction are we floating in?"

The bottle wobbled.

"Hurry up, woman," Khomich grunted.

"I think we're drifting toward—" The bottle lurched violently to one side. They collapsed on top of each other. Down on their tangled bodies came a great inrush of water.

Chapter 20

With their weight once again at the bottom of the bottle, it quickly righted itself. They got to their feet, wincing with the pain of their bruises. They were standing knee-deep in water.

"We'll just have to wait until we hit the bank," said Bruce.

"And how do we get out then—she couldn't reach the top!" Magruder looked petrified. Bruce patted him on the shoulder.

"I'll go up next time. I'm taller, I'll reach it."

"Oh yeah—of course," Magruder said seriously. Then he frowned. "But it doesn't matter which order we're in—we won't be any higher up!"

"How silly of me," Bruce said drily. "Looks like we'll have to let the bottle sink and then do a submarine escape."

"With *that* waiting to gobble us up?" Magruder exclaimed. Another big red fish was swimming lazily past the window of the bottle. Behind it came an even bigger fish colored a brilliant silver. And, behind it, a fish with red and silver markings.

"Only goldfish," Bruce said.

"Goldfish nothing—Anne told you, they're koi carp!"

"You used to be such a bundle of fun and merriment," Anne said.

The bottle bumped against black mud and softly undulating water-grass. It stopped bobbing.

"That's the bank," Bruce said, "it doesn't look too steep. What do you think, Khomich—we tip it over on its side and take our chances?"

"A little water won't kill us."

"Okay. Anne—the moment the bottle starts toppling you shin up the neck and grab for the rim. You'll have to give Stanley a pull up, the water will be pouring in on him."

"What will you and—Khomich do?" They had been through so much together, she had wanted to use his first name. He seemed amused by her hesitation. "It's Andrei, isn't it?" she said shyly.

"Yes, but I would think you meant someone else. Now—you must wrap your pistols in clothes and put them in the middle of the pack."

"What do we do if any big fish come near us?" Magruder demanded. Bruce nodded seriously.

“Splash a lot and hope they’ve been cured of their shark fantasies.”

Again, Khomich formed the base for their living ladder. When Anne was standing on Magruder’s shoulders, Khomich started to move, stamping his way inch-by-inch to the side of the bottle. Then it started to fall.

Anne’s knees slipped on glass. Water began to hit her face. For a moment she thought she was going to be swept back down into the bottle—but her clawing hands touched the rough glass at the rim and she pulled herself through the neck. Turning around, she caught Magruder’s hand. The bottle began to settle in the water. Magruder came out with a big bubble of air.

They pulled themselves away from the hole, hands slipping on wet glass. The bottle settled on the sloping bank. Through the glass they saw Bruce kicking water to propel himself up through the neck. He surfaced with a splash.

Khomich came up with the last big bubble of air. He blinked water out of his eyes. “Help me,” he said calmly just before he sank again, “I can’t swim.”

They hauled themselves to the bank along broken reeds. The rainstorm had raised the level of the pond by at least six inches, helping them to avoid the muddy stretch at the normal water-line. As soon as they were up on solid tufts of grass, Bruce turned to Khomich. “You went through all that and you can’t *swim*? Why didn’t you tell us?”

Khomich dragged off his pack. “Why should I boast about my deficiencies?”

“Oh God, I’m freezing,” Magruder moaned, his teeth chattering.

“Eat something—put on dry socks,” Bruce said, wringing out his jacket. “Come on, son, you’re supposed to be one of the intrepid pioneers of this luscious Paradise.”

When they checked the map, they worked out that they’d landed on the east side of the pond.

“Believe it or not, that was a short-cut,” Bruce said, “Section Twenty-Seven is just through those nettles. We’ll catch up with that Australian she-wolf yet.”

Anne ran her hand through her short blonde hair. She sounded cheerful, in a grim sort of way. “I don’t know whether I’ll scratch her

eyes out, or—”

“Personal emotions are a negative use of energy,” Khomich’s voice might have come from an oral-capability computer. He turned away. Anne started to speak, but Bruce shook his head. Even with his back turned they knew that Khomich was weeping. Looking away in embarrassment, they saw a red and black dragonfly patrolling its pond territory, four huge wings forming radiant arcs of glinting light. Behind them, Khomich wept silently.

“Sad, isn’t it?” Anne said softly, “so beautiful and it lives for only a day.”

“That’s a myth,” Bruce said, not daring to look over his shoulder at Khomich, “they live all summer. That dragonfly is one of the deadliest predators on earth. It can fly at forty miles an hour and it can see eight times better than human beings—each compound eye has about thirty thousand facets.” They heard Khomich blowing his nose. “What the compound eye does best is detect movement—the slightest variation in all those different pictures—”

“Have we not seen enough of these creatures?” Khomich growled.

They pulled on their packs and started to look for a clear path through the forest of nettles.

“Looks like well just have to crash straight through.”

“But a few nettle stings could be fatal for us,” Magruder protested.

Bruce led them to the first of the towering stalks. “Even in long grass, you can always tell a nettle because the stem is quadrangular. Those little white hairs cause the stings. When you brush against them, you break off this brittle tip—then the hair springs back and its sharp point sticks in your skin while this bulb at the base injects its acid.”

“As children, we were always told that a nettle wouldn’t sting if you grasped it firmly,” Anne said.

“That’s because you’ve flattened the hairs so that they can’t spring back. However, I don’t think we should be too eager to do any grasping. The rules are a bit different for us.”

Taking a last look at the gray sky, they edged cautiously past the first stem and plunged into a wet and green underworld that might have been at the bottom of the sea. Where the nettles thinned out, they plowed through huge dock leaves and coarse grasses; big black slugs prodded the air with finger-like antennae; silken ropes spun by little flying-spiders softly whipped their faces. On some of the stalks, they saw

square nettlebugs, some green, some brown, some dark chocolate with orange spots. It became harder to find openings between the tall, hairy stems.

"I keep having this terrible feeling I'm going to trip and fall face first against those poison hairs," Anne said to Bruce.

"I know, a kind of hypnotic feeling, like a dream where you're standing on a skyscraper roof and every step takes you to the... what was that?"

They stopped.

Bruce cocked his head. "I thought I heard a big bang. Let's hope it isn't thunder—"

This time they all heard it.

"That was a pistol," Khomich said.

"It wasn't far away, either. You think Lena and Carr are having a tiff?"

"She wouldn't use a gun," Anne said. "She'd suck his blood with her hollow fangs."

They saw a rotten branch covered with gray fungus. It rose out of the undergrowth, forming a huge catwalk through the nettle-stalks.

"It looks solid enough," said Bruce. "As far as I can judge, it's going the right way."

"Climb up it?" Magruder yelped. "What if we slip off? We'll go crashing down through all those nettle-leaves! Stung to death in mid-air!"

"Come on, it's wide enough to take an army."

"Sorry, I've got no head for heights."

"You will have no head for anything if you don't stop whining," Khomich growled.

They climbed onto the thick mat of gray lichen and green hypnum moss and made their way up the dead branch. They walked through what could have been a vast amphitheater, below them, the thick, wet undergrowth; above, the canopy of nettle-leaves. Magruder was suddenly struck by a new possibility.

"Hey! What if—"

"Keep your voice down."

Magruder went into a panicky whisper. "What if this damned branch just ends in mid-air? You thought of that?"

"Yes," Bruce hissed. "If it does, we'll use a nettlestem as a fireman's pole."

Magruder's eyes showed a lot of white.

As the branch began to slope toward the ground, they heard Carr, shouting frantically.

Khomich drew his pistol. Bruce gestured for Anne to get behind him. Khomich gave Magruder a warning look to keep quiet.

They came to where the nettles stopped, looking out over a rubble-strewn plain under a huge gray sky. Between them and the new wall built to seal off Project Arcadia from the rest of the grounds, the soil was light and sandy, littered by bricks and hard cement and a huge sheet of corrugated iron. Where the dead branch turned into a crown of twigs, they saw Carr. He seemed to be struggling. Lena Davidson was watching him.

"Cut the bloody things," Carr was yelling. They moved silently down the branch. Carr was caught in some fine, silver strands hanging from a twig. Only his toes were touching the ground. Lena was making no move to help him.

"Don't just stand there—cut these bloody ropes!"

She sounded nervous. "There's a spider up there—"

"I know there's a spider, you idiot! Cut me free!"

Bruce swung his legs over the edge of the mossy branch, holding his pistol in his lap. "Well well," he said. "We didn't expect to meet you hanging about here."

Lena spun round. Khomich stood up, pistol aiming down at her. "Go on," he said, "I would like to see what a mercury bullet would do to you."

She jerked her hands away from her belt.

"Get me down, *please*," Carr said.

Bruce dropped to the ground. He took Lena's pistol from her belt. He walked over to where Carr was dangling from a dozen or so vertical strands beaded with lumps of glue. He pointed up at the mottled spider hovering at the top of her curtain-like trap. "Clever, isn't she?" he said. "These strands are high-tension, she sticks them to the ground with a drop of gum. When an ant sticks to one, its struggles break the connection and the strand whips it up into the air for a lunch appointment. I don't think she was expecting such a heavy meal, Carr. Were you playing blind man's bluff?"

"A big mosquito panicked him," Lena sneered. "He thought it was going to suck him dry." Carr went on struggling, succeeding only in entangling himself in more of the sticky threads. Khomich dropped to the ground. Carr stopped struggling. "Cut me down, please," he said

quietly.

Khomich spat. "You were going to leave us to die."

Lena pouted. "All you tough soldiers—armed to the teeth? You weren't in any danger. Where's jolly old Hugh, anyway?"

Khomich slapped her. She sat down heavily, a big red welt coming up on her face. Khomich turned toward Carr, raising his pistol. "Captain Robinson is dead," he said slowly.

Carr blinked rapidly. "I was a bloody fool, sir. Sorry."

Khomich fired quickly. Carr let out a scream, jerking on the end of his puppet-strings. But Khomich had not fired at him. The mottled spider evaporated in a blast of mercury fragments. Khomich gave Bruce his pistol and took the machete from Magruder. He started cutting Carr down. "Where is Richards?" Bruce asked Lena.

"We couldn't find the capsule," Lena said, still sitting on the ground.

"Isn't Control giving you a fix on the bleep?"

"No, they stopped picking it up just before the rainstorm. They think the battery may have failed.

Khomich cut the last sticky strand. Carr dropped to his knees, rubbing violently at the sticky spider's silk on his face and clothes. Khomich waited. Carr looked up, apparently resigned to whatever punishment Khomich had in mind.

Khomich nodded, as if agreeing with some unheard voice.

Without warning, he kicked Carr in the ribs. Carr fell back, trying to scramble to his feet. Khomich went after him, slashing out with his right boot. Carr turned and ran. Khomich caught up with him at the edge of the huge sheet of corrugated iron.

"You still have your pistol, Corporal," he growled, standing back, defying him to reach for the gun.

"I deserved it, sir," Carr said. Khomich nodded, holding out his right hand. Carr gave him the pistol, butt-first. Khomich threw it behind him on the sandy soil. Then he punched Carr in the throat.

Carr went down on his knees. Khomich ran at him and sank his boot into his side. Carr caught hold of his leg. They started wrestling across the smooth undulations of the huge metal sheet, their boots crashing down like dustbin lids. At first Carr was reluctant to fight back, but whenever he managed to push Khomich away, he got another fist to the face or a boot to his groin. He realized he was fighting for his life and made a rush at Khomich. They rolled over into one of the smooth troughs, the corrugated sheet clanging like a metal sounding board.

Bruce took the radio from Lena.

"Come in, Control," he said. "This is Bruce speaking."

"Control, receiving you," said a man's voice. "Is Staff-Commander Khomich with you?" It was Major Wollaston. Bruce looked over his shoulder. "Staff-Commander Khomich is handling a little administrative difficulty," he said. "Can I speak to Doctor Jany?"

"Stand by one," said Wollaston.

He looked down at Lena. She was massaging her face. "You sure you searched this area properly?"

"Yes. Look at that bloody animal—he's going to kick Roy to death."

Bruce looked across to where Khomich and Carr were locked head-to-head, bodies arched as they tried to boot and knee each other. "No, just a short work-out to keep in trim," he said.

Jany sounded worried. "Hello, Bruce. We'd given you up for lost. Lena said—"

"What do you think has happened to the capsule?"

"The rain might have got at the pulse-battery—more likely, the systems are running down."

"How long has he got?"

"Another ten or twelve hours at most. Commissioner Towne has been calling us nonstop—he's most insistent you get in touch with him. We can put you on a relay."

"We're going to have another search of the area. Tell him I'll report when we've found Richards."

He switched off. He saw Khomich giving Carr what looked like a shattering punch to the heart. Carr fell back with a thud that reverberated the whole length of the corrugated iron.

"Khomich?" he shouted. "Richards's life-support systems must be running down. Have you finished with Carr? We don't have much time."

Khomich wiped his face with the back of his hand and picked up his hat. Carr slowly rose to his feet. They walked back together. "We'll form a line and cover every inch of this whole area," Bruce said. He pulled Lena to her feet. "Next time you pull any tricks, you'll go for a little picnic in the nettles—naked!"

They stood on soft beech mast. Above them towered the vast silhouettes of the trees. Bruce and Khomich studied the map while the others drank from their waterbottles and ate the last of their pack-rations.

"We've even covered the adjacent sections," Bruce said wearily. "Something must have moved that damned Capsule."

“Rain maybe?”

“There was no flooding here.”

“A big bird?”

“The jackdaw of Rheims? No, it looks as if we were just too damned late. Congratulations, Lena—the commissioner will give you a medal for delaying us.”

“You mean he did want George dead?” Magruder demanded. “That’s why you came here in the first place!”

“No, it wasn’t,” Bruce said. “We were sent here to find out if Richards was in a conspiracy to have Towne thrown out of office.”

“A one-man conspiracy,” Anne said quietly.

“George doesn’t want to be commissioner,” Lena snapped. “He wants to have Arcadia established as a viable environment. He isn’t interested in power for its own sake. He—”

“Is that what he told you?” Ann’s voice was almost sympathetic. “He tells all his silly little student girls different stories—”

“I’m not one of his silly student girls!”

“No, darling, you’re older than most of them. George just grabs the nearest member of whatever audience he’s talking at and—”

“There’s something moving on the ground over there—toward that big clump of canes,” Bruce said.

At the southern end of the garden, a huge copse of yellowing bamboo stalks grew beside the new brick wall which sealed Project Arcadia off from the main ground of the house.

“It looks like somebody’s having a parade with banners,” Carr said.

They crossed the soft carpet of beech mast; the first autumn leaves were twirling to the ground.

Approaching the tall canes, they saw what looked like the sails of old-fashioned galleons moving jerkily along a trail from the bamboo toward the brick wall. Then they saw that these banners were segments of newly-cut leaf.

“It’s ants,” Carr said, “they’re carrying big chunks of leaves!”

Bruce turned on Magruder. “Jany said the leafcutters’ nest was on the other side of the wall.”

“They must have found a way through. I told George we should have poured cement over the nest. That’s all we damned well need in the garden, an army of wretched ants!”

“Bruce dragged his thumbnail down the hard stubble on his cheek. “I wonder... let’s see how they’re getting into the garden. Don’t go too near the trail or the sentries will pick us up.”

They came to the exposed roots of a beech tree. By then, they were in the shadow of the huge escarpment of brown brick.

"There must be a hole in the wall down there," Magruder said.

Bruce climbed onto the root. "Yes, there's—what's that—where their trail goes round that pile of cement?" Khomich climbed up beside him. "Shiny metal of some kind," he said. "A needle perhaps?"

"That's not a needle," Magruder exclaimed. "It's the Capsule aerial! Look, you can see the two antennae at the narrow end."

Bruce snapped his fingers.

"That's it—the leafcutters!"

They all looked at him. "The leafcutters?" Lena said, frowning. "What could they have done to the capsule?"

"See where their trail goes around that slope near the big root? What's that they're carrying?"

They all peered into the gloom below the huge wall. "It's a twig," Anne said.

"They must be expanding the nest—they need twigs to act as supports for their underground chambers."

"You don't mean they took the capsule—carried it down into their nest?"

"It wouldn't be much bigger than that twig, would it? That's why Control isn't picking up the capsule bleep—it's probably five or six feet underground by now on the other side of that wall."

Anne stared at him incredulously. "You mean George could still be alive—down in an ants' nest?"

"If his life-support systems are still functioning—yes.

"What can we do, then?"

"Think of some way to get him out, I suppose. Is it a big nest, Stanley?"

Magruder raised his palms. "I've never been in it to find out."

"There's always a first time. Come on, let's see where they're getting through the wall."

Anne caught hold of his arm. "Can I have a word with you?"

They walked away from the others.

"You're not seriously thinking of trying to get down into an ants' nest, are you?" she demanded.

"We've come this far—why not?"

"You're mad! You're not even sure if he's alive—"

"There's only one way to find out."

"But you'll be risking your own life—and the others—"

“Don’t you want us to save him?”

She shook her head angrily. “That’s not the point. Hugh Robinson and Groebli and all the others would be alive but for George—”

He took hold of her arms, forcing her to look at him. “You’d be quite happy to leave him down there, wouldn’t you?”

She went red, then she started crying. He had been away from people too long, he decided. It was difficult to remember how illogical they were.

He strode back to the others.

“Right,” he said, “we’ll follow the trail and have a look at the nest.”

“We can’t go out there,” Magruder wailed. “Beyond the wall, it’s *wild!*”

Lena stared at him coldly. “Stanley, you have all the gutsy qualities of a toothless snail.”

Chapter 21

They moved with ultra-caution across the great spread of exposed tree roots, only peering occasionally to make sure they were keeping a parallel track to the busy ant trail. Then they saw how the leafcutters were getting into the garden.

"Whoever did that should be shot!" Magruder growled.

"Did you tell the bricklayers the garden was going to be full of *micronauts*?" Bruce said wryly.

It was a little arch some bricklayer had made over a gnarled root, only about three or four inches high. Through it, the ants were pouring in both directions, mediae workers with huge leaf-sails balanced in their ferocious jaws, guarded by large-headed maximae sentries.

"Give me the radio," Bruce said. "Keep down and keep quiet."

"Control receiving you," said a woman's voice.

"Let me speak to Doctor Jany."

While he waited, he gave Anne a questioning look. She looked away.

"Jany here."

"Bruce. Listen, please. Richards is in the leafcutters' nest—"

"What?"

"Will you just *listen*, damn you? They've found a way into the garden under the brick wall. I'm pretty sure they've taken the capsule to use in building one of their chambers. We're going out there to see how big the nest is."

"You mustn't do that! I'll send some of our people around there with spades—"

"*Listen!* The moment they feel the vibrations of full-size feet, they'll withdraw into the nest for a siege."

"We can gas them out then."

"I'm sure George Richards would like that."

"Sorry."

"Some of their nests are big enough to swallow up a horse—the entrances can be a hundred meters apart. If you started digging into one that size, the whole thing would cave in and he'd be buried forever. If it's a small nest, we might risk spades—we'll let you know. Can you pick up our radio from outside the wall?"

"If we can't, the Recovery Vehicle should be able to."

"Okay—get it down to the south-east corner—we may have to come out in a hurry. Over and out." He gave the transceiver to Anne. "From now on, you're in charge of communications. The rest of us had better look for something to use as weapons—the vibrations of a pistol shot would put the whole nest on maximum alert, maybe even bring the walls down."

As they made their way toward the brick wall, Khomich picked up a solid twig, swinging it like a club. "Are their heads hard?"

"Oh no, you can easily smash their brains in. The first hundred would be a cakewalk. The first thousand might make your arm a bit stiff. The first ten thousand will be walking all over you. Don't be under any illusions—this is a fortress and there could be a million of them defending it. Those big sentries have jaws that will do a quicker job on your legs than steel-cutters. These aren't just brainless creepy-crawlies living down in a hole in the ground. They can throw out one scent that says—'Danger, let's run'—and another that says—'Danger, stand by to repel boarders.' If one of them gets in trouble, it can send out an SOS—they move their gasters up and down and a spike rubs on ridges to make a chirping noise. If the others hear that noise, they'll come running in the hundreds. One *good* thing—leafcutters can't spray formic acid like most ants."

Carr swallowed uneasily. "I only joined the army for three square meals a day."

"We have one advantage," Bruce said.

"Glad to hear it."

"We're not going in there to fight them, we're going to outwit them. Think of it as taking on a million computers—they're ferocious, but they weren't programmed to show initiative. We can change our tactics—they can't."

They reached the massive wall of brick. Anne walked beside him. She hesitated... "I didn't actually mean we should deliberately leave George to die, you know."

"No, of course not. I'm sorry if I misunderstood you," he said in a stiff voice.

As they waited for a break in the constant flow of ants, Lena gave his arm a nudge. When he looked at her, she gave him a cheeky wink.



Two medium-sized workers were approaching the other entrance.

He took a deep breath, then raced toward the open archway left by a bricklayer who couldn't be bothered to cut through a root. It was like

running under a low bridge. Two medium-sized workers were approaching the other entrance. They raised their antennae at the vibrations of his boots. He ran past them. He came out in a vast open space of browns and blacks, immediately veering away from the trail and running toward a clump of Earth Star fungus. No ant followed him.

Carr came next. "There's some coming with leaves," he gasped.

They watched from the shelter of the buff pillars of fungus. The sail-like banners of cut leaf-fragments emerged from the tunnel. "Look," Carr hissed, "there're little ones riding on top of the leaves!"

"Bodyguards. There's a type of parasite coffinfly which tries to lay its egg on the head of the big workers while their jaws are busy carrying leaves. The little workers sit up there and frighten it off."

"Clever bastards, aren't they?"

"We're cleverer—I hope."

Anne appeared—and then Lena. He stood up and waved. They dropped, panting, behind the fungus.

Magruder came galloping out of the tunnel, running dementedly as if pursued by wolves. He flopped down beside them holding his side.

Khomich appeared, running easily.

"Right," Bruce said. "Anne and Lena will stay here. We will—"

"I think we should stick together," Anne said. He shook his head.

"You stay here and keep in touch with Recovery. The ants won't come this far off the trail. Right?"

The four men picked up their sticks and started across a vast brown landscape under a heavy gray sky. They kept parallel to the winding trail of leaf banners until they came to a half-brick thrown away by the workmen who built the wall. They looked over a saucer-shaped depression.

"That's a *skull*," Carr hissed.

"Looks like a vole—that's their rubbish dump." Bruce scanned the heavily-littered depression. "I can't see any human bones—he must still be in the capsule, or they'd have dealt with him by now. Look—there's the main entrance. See those sentries?"

There were five of them moving in front of the dark tunnel, large-headed soldiers with scissor-shaped jaws, their antennae restlessly testing the air. Into the hole disappeared two medium-sized workers carrying their newly-cut segments of leaf.

"What are those leaves for?" Khomich asked.

"They're farmers," Bruce explained, "they have big chambers where the little workers masticate leaves and spread the paste out in beds—"

they grow a fungus called Bromatia, it's the only thing they eat."

"Farmers," Khomich said incredulously. "All my family were farmers."

"We must get those sentries away from the entrance. We can't just rush over and kill them; they'd warn all the others with their danger scent."

"Will they respond to a diversion?" Khomich asked.

"That's it! If we attacked some workers on the trail, the sentries would rush across to defend them, then we could slip into the tunnel."

"Who's we? Magruder squeaked.

"I know what kind of lay-out to expect, so I'm one." Bruce looked at Khomich.

Khomich turned to Carr. "Take your choice, Corporal. I won't order you to go down in there."

"I'd rather stay in the open, sir, if that's all right."

Khomich nodded.

"What about me?" Magruder hissed.

"Stay here. If we get in trouble, run back to Anne and call Recovery for help."

"What if they attack me?"

"Get on top of this brick and kick like hell! Carr—hit them about halfway between the next entrance and the wall. Go for some leaf-carriers that don't have an escort. And then get back to this brick as fast as you damned well can."

They watched him run off at a crouch.

Khomich looked at Bruce. "You would have made a good field-officer, Professor."

"Good at organizing suicide missions," Magruder moaned.

Carr waited until the big leafcarrier had jogged past him, its jaws supporting a rough square of green bamboo leaf many times its own size. He swallowed and then ran out diagonally from behind a low mound.

It was about the size of a terrier dog—smaller than he had imagined. He came up behind it on his toes and swung his stick down on the shiny armor of the big round abdomen.

Crunch!

He was splattered by pale blood. He smashed down on it again. The huge sail of leaf collapsed to one side. A bittersweet acid smell hit him in the face.

He started to turn away, looking for another ant to kill—but the first one was not dead. Dragging its crushed abdominal gaster across the rough ground, the ant turned, its jaws snapping, its long antennae flicking like angry whips...

“They’re getting the danger scent now!”

Three of the five massive-headed sentries raced along the trail. The other two hesitated, antennae testing the air, touching each other excitedly.

They saw Carr swinging his club again and again.

“They’re moving!”

They came out from behind the brick and raced down across the hideous midden where the ants dumped their refuse—and their dead.

The tunnel had a sweetish, musty smell. For a few moments, they could see by diffused daylight, then they were in darkness. The ground under their feet was worn smooth by countless millions of delicate feet. They switched on their torches. The tunnel went down to a curve. There was a humid, warm draft in their faces.

With torches in one hand and sticks in the other, they followed a subterranean route never before trodden by the feet of men...

Carr ran back in a wide detour and dropped panting behind the brick.

“Are they following me?” he gasped.

Magruder peered over the top of the brick. “No, but they seem pretty excited. They’re touching each other and running all over the place.”

“I had to smash it flat before it stopped trying to grab me.” Carr grimaced. “I’ve got its blood all over me. What a stink! You got to hand it to Khomich—I wouldn’t go into a bloody ants’ nest.”

“Do you think—” Magruder hesitated. “Do you think we’ll ever see them again?”

“I’ll tell you, mate, there’s only one rule in this world if you’re a soldier—every time you say goodbye, you presume you won’t ever see that bloke again. Then, if you do—it’s a nice surprise, isn’t it?”

“I feel sick!”

Bruce and Khomich turned a corner in the sloping corridor and found their torches shining on the oval head and whiplash antennae of a medium-sized worker. It hesitated, head swinging from side to side. Then it started to pull back. Bruce jumped after it, swinging his club.

Blood spattered their faces as he smashed the stick down into the chitinous shell of the head. The ant collapsed, but its six legs went on

jerking against the smooth floor of the tunnel.

“It would have carried a warning all through the nest. Come on, Khomich, jump on it!”

Bruce began stamping down brutally on the still quivering body, smashing open the big gaster stomach, rubbing his boots in the mess.

“What are you doing that for?” Khomich growled.

“Down here they have to rely on scent and touch. If we smell like one of them they might not bother to feel us with their antennae. Hurry up, man, get it all over your boots and your trousers—once they touch you with their antennae they can see your outline as clearly as if you were floodlit.”

Dark as it was, Khomich had to close his eyes to conquer a revulsion so powerful it made his skin crawl and his stomach burn, a fear so nightmarish it seemed to threaten his very sanity...

Their torches lit up the entrances to five different tunnels leading off a low, round chamber. Bruce chewed his lower lip. He shined his torch down each tunnel, looking for signs of newly-disturbed earth.

“That one goes back up to the top,” he was saying when they heard a rustling and scraping from the tunnel they had just come down. He switched off the torch, pulling Khomich into the side.

They stood motionless in pitch darkness. The scraping came nearer—and then passed them. They breathed slowly, trying to make no sound.

Bruce flashed the torch for a fraction of a second. An upright triangle of green leaf was disappearing into a tunnel on the opposite side of the low connecting chamber. He pulled at Khomich’s arm.

“Give it a moment, then we’ll follow it down there,” he whispered, “and for God’s sake don’t have a fit of coughing!”

They shielded their torches with their hands, throwing narrow beams that gave just enough light to guide them down the slope. They seemed to hear echoes of rustlings and scrapings. A steady draft of warm, musty air caressed their faces. Then they sensed that they were no longer confined by the steep walls of the tunnel. Bruce felt for Khomich’s shoulder.

“I think we’re in a chamber,” he whispered. “Flash your torch just once—then be ready to run.”

In a brief moment of white light, they saw something which almost made them forget why they were there. In a space the size of a cathedral, small ants were working busily on a huge bed of pale,

rounded fungi that stretched from wall to wall. Some were weeding, some were carrying newly-cut fungi, some were laying down new strips of masticated leaf paste. At the bottom of the wide slope below them, more ants were chewing on fragments of leaf piled loosely as if in a farm yard at harvest time. All of it was taking place in methodical, purposeful silence. For that brief moment, they had a sensation of having looked into the heart of something secret and timeless, a hidden world that neither knew nor cared about the clumsy, clamorous strivings of the doomed giants who crashed about on the surface of the earth.

Bruce nudged Khomich. Some of the small workers had lifted their heads, antennae testing the air.

They moved back up the tunnel.

"They're not doing any building work down there," Bruce murmured. "We'll try the other tunnels."

As they came up into the connecting chamber, they heard more rustling. Again, they pulled back against the wall, hands tightening around their sticks.

This time, the sounds were more violent. They sensed the presence of a large number of ants in the darkness at their feet, but they dared not switch on the torches. Something brushed against Khomich's chest. He froze on a scream that went on echoing through his brain. There was a dragging sound. Delicate feet scraped on the smooth floor. They found it easier to concentrate on the patterns of noise by keeping their eyes tightly closed.

The dragging noise began to move away from them. Bruce flashed his torch.

They saw something moving into the darkness of the tunnel to their left. There was loose earth on the floor.

"They've just dragged a twig down there," he hissed. "That could be it."

They felt along the walls of the tunnel, stopping every few steps to listen.

Again, they had the unmistakable sensation of being in the open. Their boots touched loose earth.

They switched on their torches simultaneously, without any need for physical communication.

"You must be quite obsessed with George," Anne said grimly. "Is he in love with you?"

Lena's wide mouth was set tight. She shrugged, unwilling to discuss it. Anne smiled reproachfully. "I used to be in love with him—or at least I thought it was love. I suppose we're all suckers for any man who sweeps us off our feet with the great messiah act."

"It isn't an act! He is a great man. Your trouble is you haven't got the imagination to—"

"My trouble is that I've lived with him for six years and I know what he's really like. Marriage to George is like adultery—you always have the guilty feeling you're coming between him and his true love, George Richards. I often wonder if he would actually recognize my face in a crowd of two."

For a moment, the light did not register on the nervous systems of the construction teams—big workers, some crawling up the sides of the half-constructed chamber, some pulling and pushing at the heavy twig they had just dragged all the way from the garden and down the tunnel, others using their scissor-jaws as earth-excavators.

The torch shone on something metallic. There was a glinting reflection of light from a perspex panel.

"Richards!"

The metal capsule was buttressed into the wall of soft earth. Through the panel, they had a glimpse of a man's face, blinking against the light.

As the big workers began to run across the floor of the chamber, they raced toward the capsule, sticks pushing at the probing antennae.

An electric charge seemed to touch each ant simultaneously. Antennae flicked the air. Convex heads jerked from side to side. Jaws opened and closed.

Bruce evaded two ants and grabbed at the handle sunk flush in the curved panel door. He shone the torch into the narrow cylinder.

Richards was sitting upright, strapped against the wall. He screwed up his face against the light.

"Can you walk?" Bruce hissed, fumbling at the metal clip of the broad canvas belt.

"Who is that?" Richards growled. "Where am I?"

"Bob Bruce—you're in the leafcutters' nest. Come on, man, get this belt off."

"Bob Bruce?" said the big man with the black hair. "What the hell are you doing here?"

The belt fell away.

“Never mind that, let’s get out of here. We’ll have to run—

“How the hell did you find out about Arcadia?”

“For God’s sake, man—*get out!*”

Khomich smashed his stick into the head of a big worker. Its six legs went on propelling it forward. He kicked at it. He hit out at another. The ants were going berserk—yet the communal brain of which each was only a single cell had not yet made its analysis of the disturbance.

“My legs are cramped. You’ll have to carry me,” Richards said irritably.



"Hurry up, Bruce," Khomich shouted, swinging his stick viciously from side to side.

"Hurry up, Bruce," Khomich shouted, swinging his stick viciously from side to side.

The torch fell as Bruce took Richards's weight. He reached down for it. Thin legs ran across the beam. Antennae touched his hand.

"You'll *have* to walk, damn you," he snarled.

More ants began to pour into the chamber. The message was spreading throughout the labyrinthine tunnels and chambers of the huge nest—*Attack!*

Bruce tried to lift Richards onto his shoulder. Richards collapsed, making no effort to support himself.

For a moment, Bruce felt helpless. Khomich was being pushed back against the capsule by the sheer number of ants in the chamber—yet still they seemed confused, unable to focus on the source of danger, desperately running here and there in jerky spurts as they tried to identify the aliens who had dared to penetrate the fortress.

Bruce made his decision. He shoved Richards back into the capsule. "You're not going to leave me here," Richards snapped. "Carry me on your back."

"We can't fight them off and carry you as well. Just sit tight—we'll be back, we know where you are now."

"I won't be going anywhere," Richards said testily as the panel door slammed in his face.

Bruce made sure the handle was securely closed. Then he and Khomich began to dodge through the seething mass of ants, jumping to avoid the antennae, their ears filled with urgent clickings and rustlings
...

Magruder heard the yelling. He pointed across the ants' midden. "They're coming out!"

"Come on," Carr said firmly. "We'll have to help them, by the looks of it."

He left the shelter of the brick and ran toward the nest entrance. All along the trail, the message was being flashed. Leaf carriers dropped their huge loads and scuttled back to the fortress that must be defended to the death; ants had no individual wills—the nest-fortress and the queen in her royal chamber down in the very heart of it was both their home and their brain, the ultimate corporate state, whose every member was programmed for self-sacrifice.

Magruder ran a few feet into the midden, then hesitated. He saw Bruce and Khomich backing out of the tunnel, shouting for help, swinging their clubs at an advancing line of antennae and jaws. An ant's head was smashed—another ant climbed across its struggling body, throwing itself at the alien intruders.

Bruce drew his pistol and started firing. Carr ran up the slope of the midden. They all had their pistols out, firing again and again. Ants dropped on top of each other—and more ants climbed over the dead bodies. When one ant was blown to pieces, five more took its place.

Shoulder-to-shoulder, they backed away from the mound of the nest. A big soldier came forward, its jaws opening and closing like twin-scythe blades. Khomich's bullet blew its big round gaster stomach to pieces. The jaws went on snapping, the legs went on running.

"Don't turn your backs on them." Once in the grip of even a single pair of jaws, there would be no escape.

Magruder closed his eyes. Then he ran back to the brick, his whole body trembling.

Bruce stumbled on loose rubbish. Two big soldiers came forward, relentless automatons. Khomich swung at their antennae with his club. Bruce got up, firing his pistol. The clip was empty.

Paralyzed with fear, Magruder watched helplessly from behind the brick. "Don't make me go out there," he was mumbling, when something touched his leg.

He looked down. The brown head looked like a distorted egg. For a moment, it could have been a dog nuzzling affectionately against his knee. Then he felt the pain.

He let out a scream and jumped for the top of the brick. They had spread out from the trail, driven by the remorseless need to destroy all aliens, huge-headed sentries who had picked up a trail of animal scent. Magruder had no ant blood on his trousers, nothing that would momentarily confuse the razor-keen perceptions of their nervous systems. The trail of alien scent had led straight to him.

He got his elbows on the flat top of the brick. His hands clawed for a grip on the rough surface. Something was pulling him back.

"Help!" he screamed, tearing off a fingernail as he tried to drag himself to safety.

Something touched his face. Thin legs straddled him. The ants had no difficulty in climbing on to a brick. He closed his eyes in terror, striking out blindly, trying to feel for his pistol. Jaws seized his legs in a grip that only death would loosen.

They turned and ran up the slope of the midden.

"Help!" came Magruder's tortured voice. "Help me, help me, help—"

The big jaws were clamping into the very bones of his head—and then he was silent.

Khomich and Bruce and Carr veered away from the brick and ran for

their lives across the vast brown plain...

Chapter 22

Bruce stood with his head lowered, eyes closed. Khomich and Carr reloaded their pistols.

“They’re sniffing along your scent,” Lena hissed, crouching behind the smooth pillar of buff fungus. “They’re going to find us here before very long.”

Bruce gulped air through his mouth, his eyes still closed.

“Did you see George?” Anne demanded.

Khomich nodded. “He can’t move his legs. We couldn’t carry him because there were too many of them. I am sorry, Mrs. Richards.”

“We can’t just leave him,” Lena said accusingly.

Bruce opened his eyes. He stared up at the gray sky, his mouth hanging open.

“We would be torn to bits before we were halfway to the tunnel,” Khomich said.

“He’s right,” Anne said firmly. “There’s no point in more people getting killed. You saw what happened to Stanley—”

“Stanley was a bloody coward,” Lena said grimly, “he just stood there and watched.” She looked at Bruce. “Could you live with your conscience—leaving George to a living death down there? Of course you couldn’t, Bob. You’re not that sort of man.”

Khomich looked across the barren ground at the seething line of ants. “If we could start a fire—no, everything is damp from the rain. But if we had petrol—

“A fire?” Bruce shook his head. “We’d burn up the ants in their thousands, but Richards would be right there in the heart of it.” He bit his lip. “No—you’re right—”

“You can’t have a fire, you’ll burn George to death,” Lena shouted hysterically.

“Not that kind of fire. Bruce to Recovery Vehicle. Do you read me, over?”

“Loud and clear.”

“Relay this message to Doctor Jany. Immediately. We have been inside the nest—Richards is still alive in the capsule. We need a diversion to draw the ants out of the center of the nest. Jany told me

you have a colony of driver ants in your Insect House—is that correct?”

“Yes, safe behind glass, thank Christ.”

“Tell Jany I want those driver ants dropped on the east side of the leafcutter nest—

“How the hell do you expect us to do *that*?”

“I don’t care how you damned well do it. Put them in a box and drop them from your crane-arm ... do whatever the hell you like, just get them down there!”

“I’ll get Doctor Jany on the relay, he’ll speak to you.”

He hissed sharply, but the radio was silent.

“What’s the point of bringing in *more* bloody ants?” Lena demanded.

He stared at her coldly. “I want to start a fire.” The transceiver crackled.

“Jany to Bruce—”

“Listen, Jany. Richards is still alive in that nest. We need a diversion to give us a chance to carry him out. Please listen and then do exactly what I tell you. Get every single driver ant you have in that Insect House of yours. Put them in a box or a glass tank or whatever you like and drop them on the east side of the leafcutter nest—for Christ’s sake, get that right—the east side, we’re up here near the beech trees. Do you understand?”

“Understood,” said Jany, “I’ll see to it myself. Good thinking, Bruce, you—”

“Get on with it, man!”

They heard a thunder that was the engine of the big truck with the extendable crane-arm. “How do we know they’ll attack each other?” Carr asked.

“The driver ant is just about the most aggressive, vicious, dangerous, hostile creature on this earth. They’re blind, but they don’t find that any great handicap. Those leafcutters are in a highly tense state, they’re expecting an invasion. We’re going to start a living fire!”

On the transceiver, they heard the crane operator. “I’m going to let the glass tank fall. I can’t let it down gently because I don’t want any of those brutes crawling back up the arm.”

“Make sure the glass breaks,” Bruce snapped into the transceiver.

“I’ll raise the arm as high as it will go. If it doesn’t break I’ll smash it with the fork-handle. Can you check that I’m over the right area?”

They peered across the brown plain. The scouts and sentries were still

agitatedly running back and forth between them and the nest.

“Yes—drop it now,” Bruce said.

“Bombs away then!”

They heard a vast explosion of smashing glass.

The black driver ants were hurled on to dry earth and soft mosses. Blind by human standards, they had no difficulty in finding each other. They immediately fell into their usual column, small workers herded together by massive warriors, a living river of destruction, the ultimate death machine.

Finding themselves in cold daylight, they sent out scouts. Messages flashed back to the column. With no queen or pupae to carry and protect, their automatic response was to find shelter. The column began to move, wheeling like a disciplined regiment, the huge-jawed soldiers guarding the flanks and the rear. When the column had passed, they raced to the front again, overlapping other sentries.

They reached the tunnel. First, the big soldiers went in. Quivering antennae passed the message back. Like military policemen, the warriors kept the column in order, turning back any blind worker who deviated from the chosen route.

They began to flood into the leafcutter nest.

At first, they met only a few leafcutter sentries. These were quickly mutilated and overrun. The column poured down into the narrow tunnels, tearing to pieces anything that stood in their way; a full column of drivers on the march could strip a tethered horse to a skeleton—or devour a large snake without breaking step.

They were much larger than the leafcutters—but this was the home-fortress for the smaller ants, who also had numbers on their side. Already tense and alert from the intrusion of the two aliens, the leafcutters had geared themselves up for defense. Scouts raced back through the labyrinth. The attack was coming from the other side of the fortress!

The first stages of the battle took place in total darkness. Guided by scent and touch, the two armies needed no light, no distinguishing uniforms, no banners to rally round. It was a battle of a scale to make human conflict—Austerlitz or Stalingrad or any river of blood from the Middle Ages—seem a mere skirmish, a battle fought by two armies in which there was not a single coward, where every soldier gave of himself far beyond the call of duty, where every combatant would

sacrifice his own life without hesitation, a battle fought between thousands of computerized heroes.

Gradually the superior numbers of the defenders began to push back the invading column of drivers. Having no conception of defeat, they were forced to retreat simply by sheer weight. They fell back up the sloping tunnels. The defenders advanced across a carpet of corpses, their own and the enemies'. Then they poured out into the gray daylight...

“Why don’t they move?” Khomich snarled, glaring at the handful of sentries still guarding the tunnel beyond the midden.

“They’re not stupid—they won’t leave any entrance completely unguarded,” said Bruce. “Come on, we’ll have to kill them, that’s all. Let’s hope all their reinforcements are fighting the drivers on the other side.”

They came out from behind the buff fungi and raced across the bare plain. They ran past the scattered jigsaw of flesh which had been Magruder and down into the midden, drawing their pistols as they sprinted past the bleached bones of the rodent’s skull. The vibrations of their pounding feet alerted the small company of sentries.

“Kill them,” Bruce shouted, “they’ll carry a message if we don’t kill them all.”

They came toward the tunnel shoulder-to-shoulder. As the pistols fired and the ants disintegrated, the air filled with the same bittersweet acid that marked the death of every ant...

A huge driver bit a leafcutter in two with one snap. The severed head of the leafcutter went on fighting, vainly trying to reach the huge black driver with its jaws, oblivious to its own theoretical death. Two more leafcutters sank their jaws into the driver warriors abdomen, seizing onto its legs. It dragged them at its sides, huge jaws crunching through another leafcutter’s thorax; its front legs were torn off. It went on fighting, dragging its dismembered body across the corpses and the twitching fragments of corpses. They fought head-to-head, like rutting stags, antennae whipping the air. To human eyes, the savagery was incomprehensible in its total lack of emotion. There was no shouting, no ebbing and flowing of fortunes, no tactical withdrawals; eeriest of all, no individual emotions, no distorted faces, no screams; the severed leg caused no hesitation; no wounded limped back from the front-line; no

body twisted in pain; no eyes showed terror or triumph; head-to-head, jaw-to-jaw, locked in a combat that was primeval in its intimacy; an Armageddon that sounded like the rustling of sand in a breeze. Cut in half by a leafcutter, a massive driver warrior became two warriors, one which could bite, but not run, one which could move, but had neither eyes nor jaws to find the enemy it still lusted to destroy.

The tunnels were deserted. They ran down into the heart of the nest. Occasionally, they met a small worker running desperately; they kicked it aside and ran on.

They reached the half-constructed chamber. Their torches shone on the perspex window. Bruce yanked the door open.

"Khomich will carry you on his back," he snapped, pulling Richards off his narrow seat.

"Khomich? Butcher Khomich? Who gave authority for a damned Security stormtrooper to interfere in my project?" were the irritable words of Professor George Richards, chief-coordinator of Special Research Projects, Department of Science, World Food Control. "Did Towne send you people? I hope you don't have any ideas of *meddling*, Bruce."

"Come on, Mister bloody Professor," Khomich growled, heaving Richards onto his shoulder.

They had to go slowly up the tunnel.

"There aren't any ants here," Richards said, almost accusingly. "I wish you'd stop banging me against the walls, man."

But there were ants still in the heart of the nest. The communal organism, the body whose individual cells had free-range mobility, was not panicked into total disarray. Attacks could come from every direction. Already, on the open plain to the east of the nest, the surviving drivers were being grimly hunted down and encircled and massacred in what had to be a total rout. Some of the defenders were already falling back to man the other defenses.

"There're some coming up behind us," Bruce said calmly.

"Should I put him down?" Khomich asked. "We'll fight them off."

"No—keep going. You go with him, Carr. There may be more at the entrance."

"We can't leave you, Professor," said Carr. "Where are—"

"Keep going!"

He shined his torch back down the tunnel. They were leafcutter soldiers, maybe a dozen of them, maybe an endless stream of them. He ran backwards, keeping his torch on them. There was no hesitation now;

the hard, stiff bodies flowed toward him like unstoppable machines.

He drew his pistol. He fired. An ant's head sank to the ground in a welter of its own blood. The others swarmed over it.

He turned to run—then stopped.

Taking deliberate aim, he started firing mercury bullets at the dark ceiling of the tunnel.

It took five shots—and then there was a shuddering and a light raining-down of earth. When his pistol was empty, he turned and ran. Behind him, the roof of the tunnel started to collapse. As the mass of earth fell to trap them, the leafcutters began to send out their SOS signal, frantically jerking their bodies, spikes rubbing against hard ridges, sending out the urgent chirping noise that would bring help. But the roof was coming down in earnest and, in a moment, there was only silence and dust...

They carried Richards across the vast brown plain. Anne and Lena came out to meet them. I

"Are you all right, George?" Lena asked, her voice quiet and distant.

"I have a cramp, that's all," said the big man with the dyed black hair. He glared at Lena. "I should have thought *you* would have known better than allow a lot of outsiders to come snooping around the project."

Anne started to laugh. "You look ridiculous, George."

Jany's voice came on the radio.

"You'll have to make for Station Three, it's the nearest," he said.

"Recovery cannot pick you up for a little while—we're burning out the whole area around the nest."

"Why are you burning it?" Bruce demanded angrily.

"Well, we can't afford to let any of those drivers loose in the countryside, can we?"

"That's ridiculous—even if any of them escape, they don't have a queen. The cold will kill them off."

"It would be bad public relations if even one survived. We'll pick you up in about an hour."

Richards struggled on Khomich's back. "Jany," he shouted, "why did you let all these damned—"

Bruce switched off the transceiver. Looking at Richards, he snorted in disbelief. "Is that a damned toupee you're wearing?" he said wryly.

Richards's hand shot to his head. "George Richards—the Moses of megalomania!"

"We should get away from here before they start using the flame-throwers," Khomich growled.

Chapter 23

The Commissioner came on vision. Bruce was too drained to talk to him. He stood back beside Lena and Carr.

“Well, Khomich?” said Towne.

“We have Professor Richards here, sir. He was in a nest of ants, we were lucky to—”

“What has he told you?”

Richards was flat on his back on the floor. He shoved Anne away from his legs. “I’ve told them nothing, Towne,” he shouted. “You had no business sending your spies here to interfere with my project!”

Unable to see Richards, the Commissioner looked out of the screen at Khomich. “Who has been helping him?”

Richards dragged himself toward the screen, grabbing at a bench to pull himself up. “This is *my* project, Towne, I didn’t need any help from any damned bureaucrats!”

“You stole a lot of materials, Richards,” the Commissioner said severely.

“I am the chief-coordinator, I don’t have to steal equipment, I have the authority to commandeer what I need.”

“You have no authority to bypass official channels!”

“I’ll make a full report to the Supreme Council, Towne. They can decide whether I was stealing or not.

They’ll tell you to forget your stupid channels when they hear what we have achieved here!” The Commissioner stared coldly at Khomich. “You had my instructions—why have you not carried them out?”

Khomich said nothing. Towne banged his hand on his desk. “Khomich—why did you disobey me?” Khomich shook his head slowly.

“Captain Robinson was killed because of your instructions, Commissioner,” Khomich said firmly. “Another man was eaten by the ants—”

“I don’t care about that! Why is that traitor still *alive*?”

“I will make my report when I am back in Geneva,” Khomich said. His voice grew louder. “There has been enough killing, Commissioner—”

Richards grabbed at Khomich’s chair and pulled himself in front of the video-screen.

"I'm no traitor, Towne," he shouted. "When I make my report to the Supreme Council and tell them what I've achieved here, they'll know who's been acting against the interests of the human race!"

"For God's sake, George," Anne began, putting her hands on his shoulders. He shoved them off, glaring maniacally at the silver-haired man in the flickering screen. "Wait until I tell the Supreme Council what I know about your double-dyed machinations, you old fool!"

The commissioner pulled himself together. "Let me speak to Bruce."

Bruce moved in front of the console.

"What is your evaluation of this lunatic project?"

Bruce shrugged. "It's a bit like space exploration—it might not be very logical if you look at it on a cost-budget basis, but it could be one way —"

"There you are, Towne," Richards shouted. "Your own man—and he's convinced this is where the future lies!"

"What I was going to say," Bruce went on calmly, "is that the Project could well be worth maintaining if it wasn't under the control of a cranky hysteric like Richards. I would like to see it put under a special Evaluation Group. In fact, I'll go so far as to say I'd like to be put in charge of the whole thing."

"No," the Commissioner snapped. "The whole place will be closed down immediately!"

"It's too big a decision for you to make alone, Towne. We need a high-powered Advisory Group, a proper budget, a lot more—"

"I cannot allow any information about this wasteful nonsense to become public knowledge. It would cause panic among the population and dissension among the Zonal Councils." The Commissioner sat back, his face assuming its impassive, public expression. "You will remain where you are until further notice."

The screen went blank.

Bruce turned to Khomich. "Which instructions didn't you carry out?"

Khomich was chewing the inside of his cheek, head nodding slowly.

"In the event of certain circumstances, I was to have everyone connected with Project Arcadia eliminated and all traces of the illegal establishment destroyed."

"All of us?" Khomich nodded. "You mean, right from the start—all the time, you knew you'd probably have to kill us all?" Khomich nodded again. "What made you change your mind?"

Khomich's mouth tightened in a quick grimace. "A personal matter."

"What were the circumstances under which you had to kill us?"

"I was to bring Richards back to Geneva only if he was in a widespread conspiracy against the Commissioner. He would have been needed for a Popular Trial."

"And with no conspiracy?"

"This project has been carried out in defiance of all the Commissioner's policies—it is no longer simply a scientific experiment, it is a direct challenge to his authority—by a man who is regarded as his chief rival. It was to be suppressed with maximum efficiency—"

"*Would* you have killed us all, Khomich?"

Their eyes met.

They both began to frown simultaneously. Without speaking, they knew what thought had just occurred to each other.

"Try to get Control on the radio," Bruce said quickly.

Lena switched on the transceiver. "Station Three to Control."

"Control receiving Station Three," came the stiff, metallic voice of Major Wollaston.

"Control—has the Recovery Vehicle finished with the ants? We want to come back."

"That is not possible."

"Why not?"

"The Commissioner has ordered you to stay exactly where you are."

"Let me speak to Doctor Jany," Bruce said.

"That is not possible."

Khomich pushed in front of Lena. "This is Khomich—get us out of here immediately, Wollaston. That is an order."

"You will remain exactly where you are, said the cold, metallic voice.

"Understood," Khomich said calmly. He gestured to Lena to shut off the transmitter. Even then, his voice remained low. "Our only chance is to reach the stream. We must leave this place immediately."

"What are you talking about, man?" Richards demanded.

"Wollaston has had orders to kill us all," Khomich said.

"He's right," Bruce said. "If you're as mad as Towne, it's the only logical thing to do. Carr—give me a hand with Professor Richards."

Richards folded his arms and sat upright in his chair. "I am going nowhere except back to the house. Towne would never dare to touch me."

"I'm staying here as well," Lena said firmly.

"I think they may be right, George." Anne went toward his chair. "Let them carry you—"

"You always were a fool, woman. Get away from me." Khomich

noddod to Carr. Richards saw them coming toward him. He quickly pulled his pistol.

“If any one of you touches me, he will get his brains blown out!” Then he sneered. “if that isn’t a contradiction in terms.”

Lena reached down and started taking off his boots. Without any warning, Khomich grabbed her around the waist...

They ran down the slope, heading for the ferns. When Anne hesitated, looking back up the slope at the alloy dome of the Safety Station, Khomich caught hold of her hand and pulled her into a sprint for the shelter of the huge fern forest.

When they came out of the ferns, they found themselves at the edge of the pool. “We must get into the water,” Khomich shouted.

The water level had dropped now that the rainstorm flooding was over. On the other side of a small inlet, Bruce saw the bottle they had sailed down the stream in. They ran toward it, climbing down off the grassy bank into the oozy black mud.

“Turn it around,” Bruce shouted. “Get the water out of it!”

As they began to wrestle with the slippery glass, Anne stood back, undecided. “The soldiers wouldn’t kill us,” she said doubtfully.

“Tell her, Carr,” Khomich shouted, floundering in mud as he pulled the neck of the bottle toward the water-line. “What happens to a soldier who disobeys orders?”

“He gets shot,” Carr yelled.

“You think they would face a firing-squad for the sake of some scientists and a Security officer?” Khomich snapped. “They would enjoy burning me to death.”

Muddy water began to gurgle out of the bottle.

“I don’t think we should leave George,” Anne said, looking back up into the lush greenery of the garden. “Couldn’t we—”

They appeared above the wall surrounding the garden at that moment, black-uniformed men in helmets and goggles. A command was shouted. From the nozzle of the first flame-thrower came a spurt of white incandescence. An immense roaring sound filled the air and the sky turned into a red and yellow inferno. Each soldier directed his spout of flame into Arcadia. A storm of fire enveloped everything that stood above ground. Leaves went black, shriveled and disappeared into the holocaust. A giant sunflower seemed to stagger sideways, then toppled into the flames. A fire-wind came scorching toward them, buffeting their

tiny bodies. Flame swept the garden inch-by-inch, burning the Safety Stations and the plants and the creatures hiding under the plants, the white heat of death reaching into every crevice, burning the garden to a carpet of black ash and cinders, wiping the last vestige of Arcadia from the earth...

The bottle bobbed upright as it swung into the main current. Above them, their circle of sky was a red and yellow furnace. A thunderous avalanche of noise made words irrelevant. They could only stare at each other.

The bottle was swept slowly toward the grating under the garden wall. It scraped against something solid and then came to a halt. Through glass, they saw rusty metal stanchions. Above them, the giants spurts of flame battered against brick, coming lower and lower. Steam rose from the surface of the little stream. Anne closed her eyes as the heat came nearer.



Above them, their circle of sky was
a red and yellow furnace

With a ferocity so intense it seemed almost insane, Bruce began to shove against the sides of the bottle. Khomich saw what he was trying to do. He pushed at glass with stiff arms. The bottle began to rock back and forth. Then it wobbled—and was free of the metal stanchion. For

one last moment they peered upwards, into the burning fury...and then the sky became gray and the thunderous noise was receding into the distance.

Carr stared at muddy brown water swirling past the glass. He clenched his fists, eyes opening wide.

"We got through!"

For a long moment, they stared upwards at the gray Sky.

"I should thank you for saving my life," Lena said quietly.

Anne looked at Bruce.

"What are we going to do."

Bruce shrugged. "One thing's certain—we can't go back."

Carr raised himself on tiptoe, trying to see out above the water-line. "I suppose we just wait and see where we're washed up."

"But it was bad enough in the garden..." Anne's voice trailed off.

"What's it going to be like in the *real* wilds?" Lena said, the sneer still in her voice.

"After that damn garden, we should know enough to keep ourselves alive," Khomich said firmly.

Carr started wiping mud off his clothes. "We'll be better off on our own—"

"I bet you're scared to death," Lena snapped.

"I am," Anne said. "How can we possibly survive on our own?"

Bruce sat down wearily, rubbing his face. "It shouldn't be forever. I don't give Towne much longer as Commissioner—what we have to do is keep ourselves alive until he's replaced, then make contact again. You know what people are like, they'll hear about the Project and they won't be able to resist their curiosity—"

"Will we get back to full size again?" Carr asked.

Bruce shook his head slowly. "Not us. Towne will have had our full-size bodies destroyed with everything else. No, we're stuck with it. But they'll be sending more people down to join us—that's one thing about stupid old human beings, they hardly ever know where they're going or why, but no damned thing on earth can stop them."

Looking up, Khomich saw that the sky was a lighter shade of gray. He pointed and they all peered upwards, until the sky became blue.

Green leaves brushed against glass and then the bottle bumped to a halt.